

Palmer Soderberg, Inc.

Palmer Soderberg, Inc. - SDS Table of Contents

SDS sheets - Flooring

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ARDEX Engineered Cements	Ardex MC RAPID Resin (Part A)	Epoxy Resin	30040-A
ARDEX Engineered Cements	Ardex MC RAPID Hardener (Part B)	Epoxy Hardener	30040-B
Ardex Engineered Cements	Ardex Feather Finish	Cement-based Finishing Underlayment	30050
Ardex Engineered Cements	Ardex Featheredge k-15	Self-leveling Underlayment	30055
ARDEX Engineered Cements	Ardex P-82 Ultra Prime - Part A	Resin	30060-A
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Armstrong World Industries, Inc.	Armstrong S-310 Roll Strong Adhesive	Adhesive	30080
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Armstrong World Industries, Inc.	Armstrong S-525 Biobased Tile Adhesive	Adhesive	30090
Armstrong World Industries, Inc.	Armstrong S-202 Static Dissipative Tile Adhesive	Adhesive	30095
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Akzonobel	MSDA Fusion Activator Part 3 of 3	Floorazzo fusion activator	30099
Brenntag specialties inc.	MSDA Fusion Resin part 2 of 3	Floorazzo fusion resin	30100
Bruce Apex Pro	Apex pro	Moisture vapor barrier	30101
Bruce Bond link	Bondlink	Hard set pressure sensitive adhesive	30102
Ecore International	E-Grip-III	Adhesive	30103
Forbo	EZ-ON 100 Adh	Adhesive	30104
Henry Co	Henry 430 Floor Adhesive	Adhesive	30150
Henry Co	Henry 440 Cove base adhesive	Adhesive	30155
Interface	Nylon Tufted Carpet Tile on Glasbac Backing	Carpet Floor Covering	30165
Interface	XL Brands 9511 MVRS Moisture Vapor Reduction	Adhesive	30170
Johnsonite, Inc	Tarkett Vinyl Bond	Adhesive	30200
Kahrs HAS	Adhesive	Adhesive	30201
Kahrs	Upofloor PSA 5300	Adhesive	30202
Larson Products Corp	Weld Crete	Bonding agent	30250
LokWork	Resilient adhesive	Adhesive	30251
Mannington Mills, Inc.	Mannington V-82	Adhesive	30300
Mannington Mills, Inc	Mannington MT-711	Adhesive	30310
MAPEI Corp	Mapei M20 Plus	Adhesive	30350
MAPEI Corp	Mapei Primer T	Acrylic Latex Primer	30355
MAPEI Corp	Mapei Ultraplan 1 Plus	Cement Based Self Leveling Compound	30360
MAPEI Corp	Mapei Ultraplan Easy	Self-Leveler	30365
Milliken	Modular Carpet Adhesive 100V	Adhesive	30380
Sanco Inc.	Calcium carb part 1 of 3	Calcium carb for Floorazzo fusion	30390
Shaw lockworx	4151 Adhesive	Adhesive	30391
Sierra Corp/TK Products	TK-225 Bonding Agent	Bonding, Liquid/Agent	30400
Taylor for Shaw Industries	Shaw 5000 Pressure Sensitive Biorenewable Adhesive	Adhesive	30440
Tarkett	959HM Adhesive	Adhesive	30441
3M	8403 Conductive Floor Tile Adhesive Part A	Adhesive	30470
3M	8403 Conductive Floor Tile Adhesive Part B	Adhesive	30475
W.F. Taylor LLC	Bentley Healthbond 2399 Versatile Pressure Sensitive	Adhesive	30500
XL Brands, LLC	Goldstix	Adhesive	30900
XpressStep Premium	LVT plank tile- spray flooring adhesive	Adhesive	:D49B30A

Safety Data Sheet

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Titebond GREENchoice Acoustical Ceiling Tile Adhesive

Section 1. Identification

GHS product identifier	: Titebond GREENchoice Acoustical Ceiling Tile Adhesive
Physical state	: Liquid.
Address	: Franklin International 2020 Bruck Street Columbus OH 43207
Contact person	: Franklin Technical Services
Telephone	: (800) 877-4583
In case of emergency	: Franklin Security (614) 445-1300
e-mail address of person responsible for this SDS	: SDS@FranklinInternational.com
Reference number	: 3620
Product code	: 2704
Date of revision	: 4/24/2018
Safety Data Sheets are available online at	: www.FranklinInternational.com
Chemtrec (24 Hour)	: (800) 424 - 9300
Chemtrec International	: (703) 527 - 3887
Chemical family	: Adhesive.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Refer to safety data sheet before use. Avoid contact with skin and clothing. Wash thoroughly after handling. Get medical attention if needed. Contact Franklin International Technical Service for additional information at 1-800-877-4583.
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.

Section 2. Hazards identification

Disposal	: Not applicable.	30039
Hazards not otherwise classified	: None known.	2 of 9

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if needed.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if needed.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: This product may irritate eyes upon contact.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire. 30039
- Unsuitable extinguishing media** : None known. 3 of 9
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Do not store below the following temperature: 4.4444°C (40°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection**Control parameters****Occupational exposure limits**

None.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties**Appearance**

Physical state : Liquid. [Paste.]

Color : Beige.

Odor : Not available.

Odor threshold : Not available.

pH : 7

Section 9. Physical and chemical properties

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Melting point	: Not available.
Boiling point	: 100°C (212°F)
Flash point	: Closed cup: >93.333°C (>200°F) [Setaflash.]
Evaporation rate	: <1 (butyl acetate = 1)
VOC (less water, less exempt solvents)	: 33.18 g/l
Volatility	: 26% (w/w)
Relative density	: 1.44305

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information**Information on toxicological effects****Acute toxicity**

Not available.

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Eyes	: This product may irritate eyes upon contact.
Respiratory	: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Section 11. Toxicological information

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Inhalation.
Routes of entry not anticipated: Dermal.

Potential acute health effects

Eye contact : This product may irritate eyes upon contact.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Section 12. Ecological information

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information**U.S. Federal regulations****SARA 302/304****Composition/information on ingredients**

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

Section 15. Regulatory information

State regulations

- Massachusetts** : None of the components are listed.
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- China** : All components are listed or exempted.
United States TSCA 8(b) inventory : All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



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Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
Not classified.	

History

Date of printing : 4/25/2018
Date of issue/Date of revision : 4/24/2018
Date of previous issue : No previous validation
Version : 1

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

☑ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : **ARDEX MC™ RAPID Resin (Part A)**
Product Code : 70013741
Chemical Family : Mixture
Trade Name/Synonyms : ARDEX MC RAPID Resin
Material Use : Epoxy resin for moisture barrier
Uses Advised Against : No information available.

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

: Skin Sensitizer Category 1
Eye Irritant Category 2A
Skin Irritant Category 2

GHS Pictograms :



Signal Word : Warning

Hazard Statements : Causes serious eye irritation.
May cause an allergic skin reaction.
Causes skin irritation.

Precautionary Statements : Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or dust. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves and eye protection. Keep container tightly closed. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Store in a well-ventilated place. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards Not Otherwise Identified : None

Unknown Acute Toxicity Content : < 30% of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane	55492-52-9	10.00 – 30.00
2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane	25068-38-6	10.00 – 30.00

Alkyl (C12-14) glycidyl ether	68609-97-2	5.00 – 10.00
1-Methyl-2-pyrrolidone	872-50-4	0.10 – 1.00

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 4 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: call a doctor/physician.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.
- Signs and symptoms of short-term (acute) exposure**
- Inhalation* : Inhalation of vapors may cause mild irritation of the respiratory system. Symptoms may include coughing and shortness of breath.
- Skin* : Causes irritation. Symptoms may include redness and itching. Prolonged or repeated skin contact may cause an allergic skin reaction.
- Eyes* : Causes irritation. Symptoms may include redness, itching or pain.
- Ingestion* : May cause stomach pain with nausea and vomiting.
- Effects of long-term (chronic) exposure**
- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Some individuals may experience a sensitization reaction of the skin after an initial exposure. Subsequent exposures may cause a hypersensitive skin reaction (rash, swelling).

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Use extinguishing media appropriate for surrounding materials.
- Unsuitable extinguishing media** : None known.
- Hazardous combustion products** : Carbon oxides and/or low molecular weight hydrocarbons.
- Special fire-fighting procedures/equipment**
- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.
- Flammability classification (OSHA 29 CFR 1910.1200 2015)**
- : Not flammable
- Flammability classification (WHMIS)**
- : Not flammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Wear chemically resistant personal protective equipment during cleanup. Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

- Emergency procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.
- Spill response / clean-up** : Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal. Notify the appropriate authorities as required.
- Environmental precautions** : Do not allow product to enter waterways. Do not allow material to contaminate ground water system.
- Disposal of spilled material** : See Section 13.

SECTION 7 – HANDLING AND STORAGE

- Safe handling procedures** : Observe good hygiene standards. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid repeated or prolonged skin contact. Avoid breathing vapors or mists of this product. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed. Use only with adequate ventilation.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.
- Incompatible materials** : Strong oxidizing agents.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Exposure limits** : No exposure limits have been established for the product. Below are exposure limits for the ingredients in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane	55492-52-9	N/Av	N/Av	N/Av	N/Av
2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane	25068-38-6	N/Av	N/Av	N/Av	N/Av
Alkyl (C12-14) glycidyl ether	68609-97-2	N/Av	N/Av	N/Av	N/Av
1-Methyl-2-pyrrolidone	872-50-4	N/Av	N/Av	N/Av	N/Av
		10 ppm (USA WEEL)			

- Engineering measures** : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.
- Eye / face protection** : Chemical goggles must be worn when using this product. A face shield is recommended if splashing is possible.
- Skin protection** : Wear chemical resistant protective clothing and impervious gloves. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.
- Body protection** : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.
- Respiratory protection** : If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.
- Site safety equipment** : An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene precautions** : Avoid contact with eyes, skin and clothing. Do not breathe vapors/dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid	Appearance	: Metallic black
Odor	: Characteristic	Odor threshold	: N/Av
pH	: N/Av	Specific gravity	: 1.7 – 1.8
Boiling point	: >392°F (>200°C)	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: Immiscible
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: N/Av
Volatile organic compounds (VOCs)	: 19.9 g/L, A+B, per ASTM D2369		
Decomposition temperature	: N/Av	Flammable Classification	: Not Flammable
Flash point	: >212°F (100°C)	Lower flammable limit (% by vol)	: Not available
Flash point method	: Setflash closed	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Oxidizing properties	: None
Flame projection length	: Not available	Flashback observed	: Not available
Explosion data: Sensitivity to mechanical impact / static discharge			
	: Not expected to be sensitive to mechanical impact or static discharge.		
Viscosity	: Not available		

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Product reacts with amines to form polymers. Heat is evolved by this reaction.
Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed.
Hazardous polymerization	: Hazardous polymerization does not occur.
Conditions to avoid	: Avoid prolonged exposure to heat.
Materials to avoid and incompatibility	: Oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin and Eyes</i> : Yes <i>Ingestion</i> : YES
Signs and symptoms of short-term (acute) exposure	: See Section 4.
Signs and symptoms of long-term (chronic) exposure	: See Section 4.
Calculated Acute Toxicity Estimates for the Product	
<i>Inhalation</i>	: Not Available
<i>Oral</i>	: 10,000 mg/kg
<i>Dermal</i>	: 8,000 mg/kg
Toxicological data	: See below for individual ingredient acute toxicity data.

Ingredients	LD50		
	LC50 (4 hr) Inhalation, rat	Oral, rat	Dermal, rabbit
Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane	N/Av	N/Av	N/Av
2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane	N/Av	11400mg/kg	N/Av
Alkyl (C12-14) glycidyl ether	N/Av	17100 mg/kg	N/Av
1-Methyl-2-pyrrolidone	3.1 mg/L	3598 mg/kg	2000 mg/kg

- Skin corrosion/irritation** : May cause irritation.
Serious eye damage/eye irritation : Strong eye irritant.
Respiratory or skin sensitization : Contains multiple components which are known to cause skin sensitization reactions. Does not contain known respiratory sensitizers.
Germ cell mutagenicity : None known.
Carcinogenic status : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
Reproductive toxicity : Contains N-methylpyrrolidone, a known developmental toxin.
Specific Target Organ Toxicity, Single Exposure
: None known.
Specific Target Organ Toxicity, Repeated Exposure
: None known.
Aspiration hazard : None known.
Other important hazards : See Section 2 for additional information.

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
Important environmental characteristics
: N/Av
Ecotoxicological : No data is available on the product itself. Information on components is listed below.
1-Methyl-2-pyrrolidone (872-50-4)



Test & Species	Results & Conditions
96 Hr LC50 <i>Lepomis macrochirus</i>	832 mg/L [static]
96 Hr LC50 <i>Leuciscus idus</i>	4000 mg/L [static]
96 Hr LC50 <i>Pimephales promelas</i>	1072 mg/L [static]
96 Hr LC50 <i>Poecilia reticulata</i>	1400 mg/L [static]
72 Hr EC50 <i>Desmodesmus subspicatus</i>	>500 mg/L
48 Hr EC50 <i>Daphnia magna</i>	4897 mg/L

- Persistence and degradability** : Product is not expected to rapidly degrade.
Bioaccumulative potential : Not Available.
Mobility in the soil : Not Available
PBT and vPvB assessment : Not Available
Other adverse effects : Not Available

SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7.
Methods of disposal : Material, if discarded, is not expected to be a characteristic hazardous waste under RCRA. You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Contains: 2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane; Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane)	9	III	
TDG Additional Information	None				
49 CFR/DOT	UN 3082	Environmentally hazardous substances, liquid, n.o.s. (Contains: 2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane; Phenol, 2,2'-methylenebis-, polymer with (chloromethyl)oxirane)	9	III	
49 CFR/DOT Additional Information	None				

Marine Pollutant : Yes

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
Immediate (Acute) Health Hazard
Chronic Health Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

U.S. State Right To Know Laws

California Proposition 65: Warning! This product contains a chemical known to the State of California to cause reproductive/developmental effects.

Other State Right to Know Laws: N-Methylpyrrolidone [CAS# 872-50-4] (MA, NJ, PA).

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: *2 Flammability 1 Physical Hazard 0 PPE: Gloves, safety glasses

Legend : ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
GHS: Globally Harmonized System
HPA: Hazardous Products Regulations
IARC: International Agency for Research on Cancer
Inh: Inhalation
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. ARDEX Engineered Cements will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

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Visit our Website: <http://www.ardexamericas.com>

Revision date: : 04-May-2015

End of Document

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Identifiers

Product Name : **ARDEX MC™ RAPID Hardener (Part B)**
Code No. : 50036690
Trade Name/Synonyms : ARDEX MC RAPID Hardener
Material Use : Epoxy hardener for moisture barrier
Restrictions on Use : Use only as recommended in the product's Technical Data Sheet
Details of the Supplier

Manufacturer's name and address:

Supplier's name and address:



Refer to Manufacturer

ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Information Telephone No. : (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : **CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)**

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

: Flammable Liquids, Category 4
Skin Corrosion/Irritation, Category 1A
Serious Eye Damage/Eye Irritation, Category 1
Acute Toxicity, Inhalation, Category 3
Acute Toxicity, Oral, Category 4
Acute Toxicity, Dermal, Category 4
Sensitization, Skin, Category 1
Sensitization, Respiratory, Category 1
Specific Target Organ Toxicity, Respiratory Irritation, Category 3
Specific Target Organ Toxicity, Narcotic Effects, Category 3

GHS Pictograms :



Signal Word : **Danger**

Hazard Statements : Combustible liquid.
Causes severe skin burns and eye damage.
Toxic if inhaled.
Harmful if swallowed.
Harmful in contact with skin.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause drowsiness or dizziness.
May cause respiratory irritation.

Precautionary Statements : Keep away from heat/open flames/hot surfaces. — No smoking.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
In case of inadequate ventilation wear respiratory protection.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before reuse.
In case of fire: Use fire extinguishers suitable for Classes B, C, or E for extinction.
Call a POISON CENTER or doctor/physician if you feel unwell.
Keep container tightly closed. Store locked up.
Store in a well-ventilated place. Keep cool.
Dispose of contents / container in accordance with federal, state, and local laws.
Do not allow product to enter drains.

Hazards Not Otherwise Classified : None.

% Composition without available acute toxicity data : 25% of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
4-tert-Butylphenol	98-54-4	30.00 – 60.00
m-Xylene- α,α' -diamine	1477-55-0	30.00 – 60.00
Trimethylhexamethylenediamine	25620-58-0	10.00 – 30.00
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	1.00 – 5.00
Benzyl alcohol	100-51-6	1.00 – 5.00
3-(Dimethylamino)-propylamine	109-55-7	0.10 – 1.00

The exact percentages of the ingredients are withheld as trade secrets.

SECTION 4 – FIRST AID MEASURES

General Information : Call a POISON CENTER or doctor/physician if you feel unwell.
Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical attention.
Skin contact : Remove/Take off immediately all contaminated clothing. Wash/shower affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
Eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.
Ingestion : Rinse mouth with water. Do NOT induce vomiting. Seek immediate medical attention/advice.
Notes for Physician : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

Inhalation : May cause severe irritation to the respiratory system producing coughing and difficulty breathing. Inhalation may cause an allergic respiratory reaction.
Skin : Causes burns if in contact with the skin. Contains components which are easily absorbed through the skin. Contact may cause an allergic skin reaction.
Eyes : Causes burns if in contact with the eyes.
Ingestion : May cause burns to the mouth, throat and digestive tract.

Effects of long-term (chronic) exposure

: Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Some individuals may experience a sensitization reaction of the

skin or of the respiratory system after an initial exposure. Subsequent exposures may cause a hypersensitive skin reaction (rash, swelling) or asthma.

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
- Any burn to the skin. Blue color of the skin (cyanotic) after exposure.
- Any exposure to the eye which causes irritation.
- Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable extinguishing media : Water spray, dry chemical, carbon dioxide, foam.

Unsuitable extinguishing media : High pressure water jet may spread the fire.

Hazardous combustion products : Carbon monoxide carbon dioxide, nitrogen oxides and/or low molecular weight hydrocarbons and amines.

Fire hazards/conditions of flammability

- : Material is a combustible liquid. In a fire, this product will generate toxic vapors.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)

- : Flammable liquid, Category 4

Flash point : >169°F (>76°C) **Lower flammable limit (% by vol)** : Not available

Flash point method : Setflash closed cup **Upper flammable limit (% by vol)** : Not available

Auto-ignition temperature : N/Av **Oxidizing properties** : None

Flame projection length : Not available **Flashback observed** : Not available

Explosion data: Sensitivity to mechanical impact / static discharge

- : Not expected to be sensitive to mechanical impact or static discharge at room temperature. Static discharge at > 76°C could ignite vapors.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions : Corrosive! See Section 7 for safe handling procedures. Wear chemically resistant personal protective equipment during cleanup. Restrict access to area until completion of clean-up. All persons dealing with clean-up must be properly trained and wear the appropriate chemically protective equipment. Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Environmental precautions : Do not allow product to enter waterways. Do not allow material to contaminate ground water system.

Spill response / clean-up : Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Notify the appropriate authorities as required.

Prohibited materials : Avoid strong oxidizing agents. Do not allow spilled material to mix with epoxy resins. Chemical reaction with epoxides causes polymerization and release of heat energy.

Special spill response procedures : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.

SECTION 7 – HANDLING AND STORAGE

- Safe handling procedures** : Corrosive! Do NOT get into eyes, on skin or on clothing. Do NOT breathe vapor. Do NOT swallow. Observe good hygiene standards. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed. Use only with adequate ventilation.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.
- Incompatible materials** : See Section 10.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Ventilation and engineering measures:** Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.
- Respiratory protection** : If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.
- Skin protection** : Wear chemical resistant protective clothing and impervious gloves. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.
- Eye / face protection** : Chemical goggles must be worn when using this product. A face shield is recommended if splashing is possible.
- Other protective equipment** : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact. An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene considerations** : Avoid contact with eyes, skin and clothing. Do not breathe vapors/dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift. Contaminated work clothing should not be allowed out of the workplace.
- Permissible exposure levels** :

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TLV	STEL	PEL	STEL
4-tert-Butylphenol	98-54-4	N/Av	N/Av	N/Av	N/Av
m-Xylene- α,α' -diamine	1477-55-0	0.1 mg/m ³ CEIL	N/Av	0.1 mg/m ³ CEIL	N/Av
Trimethylhexamethylenediamine	25620-58-0	N/Av	N/Av	N/Av	N/Av
2,4,6-Tri(dimethylaminomethyl)phenol	90-72-2	N/Av	N/Av	N/Av	N/Av
Benzyl alcohol	100-51-6	N/Av	N/Av	10 ppm TLV N/Av 44.2 mg/m ³ (AIHA)	
3-(Dimethylamino)-propylamine	109-55-7	N/Av	N/Av	N/Av	N/Av

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|---|-------------------------------|---|------------------|
| Physical state | : Liquid | Appearance | : Yellowish |
| Odor | : Amine | Odor threshold | : N/Av |
| pH | : Basic | Specific gravity | : > 1.0 |
| Boiling point | : >392°F (>200°C) | Coefficient of water/oil distribution | : N/Av |
| Melting/Freezing point | : N/Av | Solubility in water | : Immiscible |
| Vapor pressure (mm Hg @ 20°C / 68°F) | : N/Av | Evaporation rate (n-Butyl acetate = 1) | : N/Av |
| Vapor density (Air = 1) | : N/Av | Volatiles (% by weight) | : N/Av |
| Volatile organic compounds (VOCs) | : 19.9 g/L A+B per ASTM D2369 | | |
| General information | : N/Av | | |
| Particle size | : N/Av | Flammability properties | : See Section 5. |

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

- Stability and reactivity** : Stable under the recommended storage and handling conditions prescribed.
- Hazardous polymerization** : When handled according to the directions in the Technical Data Sheet, this product will chemically react with epoxy resin and will generate heat.
- Conditions to avoid** : Avoid prolonged exposure to heat.
- Materials to avoid and incompatibility** : Oxidizing agents.
- Hazardous decomposition products** : Refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

- Routes of Exposure** : *Inhalation*: YES *Skin Absorption*: YES *Skin and Eyes*: Yes *Ingestion*: YES
- Symptoms of acute overexposure** : See Section 4.
- Symptoms of chronic overexposure** : See Section 4.
- Calculated Acute Toxicity Estimates for the Product**
- Inhalation* : 3.66 mg/L
- Oral* : 840 mg/kg
- Dermal* : 1174 mg/kg
- Toxicological data** : Based on individual components, this product is harmful if swallowed or in contact with the skin, and can be fatal if inhaled. Contains components that may be absorbed through the skin in harmful amounts. See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr)	LD50	
	Inhalation, rat	Oral, rat	Dermal, rabbit
4-tert-Butylphenol	N/Av	2928 mg/kg	2268 mg/kg
m-Xylene- α,α' -diamine	3.78 mg/L	980 mg/kg	2000 mg/kg
Trimethylhexamethylenediamine	N/Av	910 mg/kg	N/Av
2,4,6-Tri(dimethylaminomethyl)phenol	N/Av	2169 mg/kg	1280 mg/kg
Benzyl alcohol	4.178 mg/L	1230 mg/kg	2000 mg/kg
3-(Dimethylamino)-propylamine	>4.31 mg/L	1870 mg/kg	487 mg/kg

- Repeated Dose Effects** : Contains components which may be absorbed through the skin in harmful amounts, especially after repeated or prolonged exposure.
- Carcinogenic status** : No components are listed as carcinogens by ACGIH, IARC, OSHA, NIOSH or NTP.
- Reproductive effects** : None known.
- Teratogenicity** : None known.
- Mutagenicity** : None known.
- Epidemiology** : Not available.
- Target Organ Effects** : Contains a component which causes respiratory irritation. Contains a component that causes Central Nervous System (CNS) effects such as headache, nausea, dizziness.
- Sensitization to material** : Contains multiple components which are known to cause skin sensitization reactions. Contains a component that may cause sensitization through inhalation.
- Synergistic materials** : N/Av
- Irritancy/Corrosivity** : Corrosive.
- Other important hazards** : See hazards listed in Section 2.

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Important environmental characteristics** : N/Av
- Ecotoxicological** : No data is available on the product itself. Information on components is listed below.

4-tert-Butylphenol (98-54-4)

Test & Species

96 Hr LC50 Pimephales promelas
96 Hr LC50 Cyprinus carpio
72 Hr EC50 Desmodesmus subspicatus
48 Hr EC50 Daphnia magna
48 Hr EC50 Daphnia magna

Results & Conditions

4.71-5.62 mg/L [flow-through]
6.9 mg/L [static]
11.2 mg/L
3.9 mg/L
3.4 - 4.5 mg/L [Static]

Trimethylhexamethylenediamine (25620-58-0)

Test & Species

48 Hr LC50 Leuciscus idus
72 Hr EC50 Desmodesmus subspicatus
24 Hr EC50 Daphnia magna

Results & Conditions

172 mg/L [static]
29.5 mg/L
31.5 mg/L

M-Xylene- α,α' -diamine -(1477-55-0)

96 Hr LC50 Oncorhynchus mykiss
48 Hr EC50 Daphnia magna

> 100 mg/L
16 mg/L

Benzyl alcohol (100-51-6)

Test & Species

96 Hr LC50 Pimephales promelas
96 Hr LC50 Lepomis macrochirus
3 Hr EC50 Anabaena variabilis
48 Hr EC50 water flea

Results & Conditions

460 mg/L [static]
10 mg/L [static]
35 mg/L
23 mg/L

3-(Dimethylamino)-propylamine (109-55-7)

Test & Species

96 Hr LC50 Leuciscus idus
72 Hr EC50 Desmodesmus subspicatus
96 Hr EC50 Desmodesmus subspicatus
48 Hr EC50 Daphnia magna

Results & Conditions

122 mg/L [static]
56.2 mg/L
57.5 mg/L
59.5 mg/L

Biodegradability : No data available.
Bioaccumulative potential : No data available.
Mobility in soil : No data available.
PBT and vPvB assessment : No data available.
Other adverse effects : No data available.



Other Adverse Effects

Material is highly alkaline and should not be discharged into sewers or waterways.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal : Handle waste according to recommendations in Section 7.
Methods of disposal : Material, if discarded, is expected to be a D002 Corrosive Waste. You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
Disposal Information : Waste must be handled in accordance with all local regulations. In case of large spills, follow all facility Emergency Response Procedures. Do not allow this material to enter into sewers/water supplies. Do not reuse containers. Dispose of container and any unused contents in accordance with local regulations.
RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN 1760	Corrosive liquids, n.o.s. (Contains: m-Xylene- α , α' -diamine, Trimethylhexamethylenediamine)	8	III	
TDG Additional Information	None				
49 CFR/DOT	UN 1760	Corrosive liquids, n.o.s. (Contains: m-Xylene- α , α' -diamine, Trimethylhexamethylenediamine)	8	III	
49 CFR/DOT Additional Information	Material is also classified as a combustible liquid with a flashpoint >169°F (>76°C).				

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:

- Immediate (Acute) Health Hazard
- Chronic Health Hazard
- Fire Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

U.S. State Right To Know Laws

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer and/or reproductive effects.

Other State Right to Know Laws:

Component	CAS	CA	MA	MN	NJ	PA	RI
m-Xylene- α , α' -diamine	1477-55-0	Yes	Yes	Yes	Yes	Yes	Yes
Trimethylhexamethylenediamine	25620-58-0	No	No	No	Yes	No	No
Benzyl alcohol	100-51-6	No	Yes	Yes	No	Yes	No
3-(Dimethylamino)-propylamine	109-55-7	No	Yes	No	Yes	Yes	No

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *3 Flammability 2 Physical Hazard 0*
Recommended PPE: Gloves, safety glasses with side shields, protective clothing

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
GHS: Globally Harmonized System
HPA: Hazardous Products Regulations
IARC: International Agency for Research on Cancer
Inh: Inhalation
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product. No warranty of any kind is given or implied. ARDEX Engineered Cements will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By:
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Revision date: : 05-May-2015

End of Document

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (888) 512-7339 or (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : **ARDEX FEATHER FINISH®**
Product ID No. : 70012141
Trade Name/Synonyms : SD-F
Material Use : Cement-based Finishing Underlayment
Uses Advised Against : No information available.

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

Skin corrosion/irritation, Category 1A
Serious eye damage/eye irritation, Category 1
Carcinogenicity, Category 1A
Specific target organ toxicity, single exposure; Respiratory tract irritation, Category 3
Specific target organ toxicity, repeated exposure, Category 1.

GHS Pictograms



Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
May cause cancer by inhalation.
May cause respiratory irritation.
Causes damage to lungs through prolonged or repeated inhalation.

Precautionary Statements

Obtain special instructions before use. (See Section 7.) Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store locked up. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards Not Otherwise Classified

None

% With Unknown Acute Toxicity : Up to 40% by weight of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Calcium aluminate cement	65997-16-2	30 – 60
Limestone	1317-65-3	30 – 60
Calcium sulfate	7778-18-9	10 – 30
Vinyl acetate copolymer	24937-78-8	10 – 30
Cellulose	9004-34-6	1 - 5
Portland cement	65997-15-1	1 - 5
Crystalline silica, quartz**	14808-60-7	0.1 – 1.0

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

**Note: Crystalline Silica (Quartz) is not intentionally added to this product, but is a naturally occurring component in limestone (Calcium Carbonate).

SECTION 4 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: call a doctor/physician.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : Symptoms may include coughing and shortness of breath.
- Skin* : Symptoms may include redness and itching. Contact with wet material, or moist areas of skin, causes skin burns. Skin thickening, cracking, or fissuring may occur.
- Eyes* : Direct contact may strongly irritate or burn the eyes. Could cause blindness.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Repeated or prolonged inhalation of fine dusts may cause severe scarring of the lungs, a disease called silicosis, and alveolar proteinosis (lower lung disease).

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any burn to the skin.
Any exposure to the eye which causes irritation.
Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, foam.

Unsuitable extinguishing media : Water. Contact with water may cause hydration and formation of caustic alkaline material.

Hazardous combustion products : Calcium oxide, calcium oxalate, vinyl acetate, acetic acid, formic acid, formaldehydes, carbon monoxide, and carbon dioxide.

Special fire-fighting procedures/equipment

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

Environmental precautions : Do not allow material to enter drains or contaminate ground water system.

Fire hazards/conditions of flammability

: Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)

: Not flammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.

Protective equipment : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Emergency Procedures : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).

US CERCLA Reportable quantity (RQ): None reported.

Methods and materials for containment and cleaning up

: Ventilate area of release. Eliminate all ignition sources. Stop spill or leak at source if safely possible. Contain material, preventing it from entering sewer lines or waterways. Using HEPA vacuum, or other dustless methods, gather up spilled material and place in suitable container for later disposal (see Section 13). Avoid adding water, material becomes alkaline when wet. Notify the appropriate authorities as required.

Prohibited materials : Avoid adding water, material becomes alkaline when wet.

Environmental precautions : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections : See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Special instructions : Mixing the product according to the directions in the Technical Data Sheet will produce airborne dusts, including crystalline silica. Wear a dust mask (N-95 or higher) while mixing. Use ventilation to control levels of dust in the work area.

Safe handling procedures : Corrosive! Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product dust is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Do not breathe dust. Avoid contact with skin, eyes and clothing. Avoid wet or humid conditions. Keep away from acids and incompatibles. Avoid and control operations which create dust. Keep containers tightly closed when not in use. Wash thoroughly after handling.

Storage requirements : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials : See Section 10.

Special packaging materials : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Threshold Limit Values for the Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
Limestone	1317-65-3	TLV Withdrawn In 2007	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Calcium aluminate cement	65997-16-2	1 mg/m ³ (as Aluminum metal and insoluble compounds)	N/Av	N/Av	N/Av
Calcium sulfate	7778-18-9	10 mg/m ³ (inhalable)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Portland cement	65997-15-1	1 mg/m ³ (respirable, no asbestos and < 1% crystalline silica)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Cellulose	9004-34-6	10 mg/m ³	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Vinyl acetate copolymer	24937-78-8	10 mg/m ³ (Total dust); 3 mg/m ³ (respirable)	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
Crystalline silica, quartz	14808-60-7	0.025 mg/m ³ (respirable fraction)	N/Av	0.1 mg/m ³ (respirable) (final rule limit)	N/Av

Engineering Controls : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any dust generated from the handling of this product.

Personal Protection Equipment

Eye / face protection : Safety glasses or chemical goggles must be worn when using this product. Additionally, a face shield is recommended if splashing is possible.

Skin protection : Wear chemical resistant protective clothing and impervious gloves. Glove materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection : If work process generates excessive quantities of dust, or exposures in excess of any PEL, wear an appropriate particulate respirator (dust mask). Mask should be rated at N-95 or higher.

Site safety equipment : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations : Avoid contact with eyes, skin and clothing. Do not breathe dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: solid	Appearance	: gray powder
Odor	: No odor	Odor threshold	: N/Av
pH	: 10 – 12	Specific gravity	: 2.7 – 3.1
Boiling point	: N/Av	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: < 55 g/L
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: N/Av
Volatile organic compounds (VOCs)	: 0 g/L		
Particle size	: N/Av	Flammability classification	: Not flammable
Flash point	: N/Av	Lower flammable limit (% by vol)	: Not available
Flash point method	: N/Av	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: Not available	Oxidizing properties	: Not available

Explosion data: Sensitivity to mechanical impact / static discharge
: Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Contact with water may cause hydration and formation of caustic calcium hydroxide.
Stability	: Stable under the recommended storage and handling conditions prescribed.
Hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: High temperatures.
Materials to avoid and incompatibility	: Oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin and Eyes</i> : YES <i>Ingestion</i> : YES
Symptoms of exposure	: See Section 4.
Calculated Acute Toxicity Estimates for the Product	
<i>Inhalation</i>	: Not Available
<i>Oral</i>	: Not Available
<i>Dermal</i>	: Not Available
Toxicological data	: There are insufficient data for estimating the product's acute toxicity. Several components become caustic in the presence of water, and therefore should not be inhaled, ingested, or allowed to contact skin. See below for individual ingredient acute toxicity data.

Acute Toxicity Parameters for the Ingredients	CAS #	LC50, Inhalation mg/L, Rat, 4 hr	LD50, Oral mg/kg, rat	LD50, Dermal mg/kg, rabbit
Limestone	1317-65-3	N/Av	6,450	N/Av
Calcium aluminat cement	65997-16-2	N/Av	N/Av	N/Av
Calcium sulfate	7778-18-9	N/Av	> 3,000	NAv
Portland cement	65997-15-1	N/Av	N/Av	N/Av
Cellulose	9004-34-6	> 5.8	> 2,000	> 2,000
Vinyl acetate copolymer	24937-78-8	N/Av	> 1,000	N/Av
Crystalline silica, quartz	14808-60-7	N/Av	N/Av	N/Av

Skin corrosion or irritation	: Causes skin corrosion when wet.
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- Serious eye damage / eye irritation** : Causes eye burns. May cause blindness.
- Respiratory or skin sensitization** : Portland cement may cause an allergic skin reaction, in hypersensitive individuals possibly due to trace amounts of chromium.
- Germ cell mutagenicity** : None known.
- Carcinogenic status** : This product contains Crystalline silica. Crystalline silica (respirable size) is classified as carcinogenic by inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive toxicity** : None known.
- Specific Target Organ Toxicity, Single Exposure** : May cause respiratory irritation.
- Specific Target Organ Toxicity, Repeated Exposure** : May cause lung damage upon repeated or prolonged exposure.
- Aspiration hazard** : None known.
- Additional information** : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicological** : No data is available on the product itself.
- Ecotoxicity** : No data available.
- Biodegradability** : No data available.
- Bioaccumulative potential** : No data available.
- Mobility in soil** : No data available.
- PBT and vPvB assessment** : No data available.
- Other adverse effects** : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7.
- Methods of disposal** : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- Packaging** : Handle contaminated packaging in the same manner as the product.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None

49 CFR/DOT Additional Information	None
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SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL).

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes:
Immediate (Acute) Health Hazard
Chronic Health Hazard.

Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: Warning! This product contains a chemical known to the State of California to cause cancer. It contains Crystalline silica, quartz.

Other State Right to Know Laws:

Ingredient on State RTK Law?	CAS #	CA	MA	MN	NJ	PA	RI
Limestone	1317-65-3	No	YES	No	YES	YES	YES
Portland cement	65997-15-1	No	YES	No	YES	YES	YES
Calcium sulfate	7778-18-9	No	YES	No	YES	YES	No
Cellulose	9004-34-6	No	YES	No	YES	YES	YES
Crystalline silica, quartz	14808-60-7	No	YES	YES	YES	YES	YES

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *3 Flammability 0 Physical Hazard 1* PPE: G
 Gloves, safety glasses, and dust respirator

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
 CAS: Chemical Abstract Services
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
 CFR: Code of Federal Regulations
 DOT: Department of Transportation
 DSL: Domestic Substances List
 EPA: Environmental Protection Agency
 GHS: Globally Harmonized System
 HPR: Hazardous Products Regulations
 IARC: International Agency for Research on Cancer
 Inh: Inhalation

N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

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End of Document

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (888) 512-7339 or (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : ARDEX K 15[®]
Product ID No. : 70011601
Trade Name/Synonyms : K 15
Material Use : Premium Self-Leveling Underlayment

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29CFR 1910 (OSHA Hazard Communication Standard)

Skin corrosion/irritation, Category 1A
Serious eye damage/eye irritation, Category 1
Carcinogenicity, Category 1A
Specific target organ toxicity, single exposure; Respiratory tract irritation, Category 3
Specific target organ toxicity, repeated exposure, Category 1.

WHMIS Classification

Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material);
Class E (Corrosive Material).

GHS Pictograms



Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
May cause cancer by inhalation.
May cause respiratory irritation.
Causes damage to lungs through prolonged or repeated inhalation.

Precautionary Statements

Obtain special instructions before use. (See Section 7.) Do not handle until all safety precautions have been read and understood. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection. Wash contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Store locked up. Dispose of contents / container in accordance with federal, state, and local

laws. Do not allow product to enter drains.

Hazards Not Otherwise Classified

None

% With Unknown Acute Toxicity : Up to 58% by weight of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Crystalline silica, quartz	14808-60-7	30 – 60
Limestone	1317-65-3	10 – 30
Calcium aluminate	65997-16-2	10 – 30
Calcium sulfate	7778-18-9	5 – 10
Portland cement	65997-15-1	1 – 5
Vinyl acetate copolymer	24937-78-8	1 – 5

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 4 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: call a doctor/physician.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : Symptoms may include coughing and shortness of breath.
- Skin* : Symptoms may include redness and itching. Contact with wet material, or moist areas of skin, causes skin burns. Skin thickening, cracking, or fissuring may occur.
- Eyes* : Direct contact may strongly irritate or burn the eyes. Could cause blindness.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Repeated or prolonged inhalation of fine dusts may cause severe scarring of the lungs, a disease called silicosis, and alveolar proteinosis (lower lung disease).

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
- Any burn to the skin.
- Any exposure to the eye which causes irritation.
- Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, foam.
- Unsuitable extinguishing media** : Water. Contact with water may cause hydration and formation of caustic alkaline material.
- Hazardous combustion products** : Calcium oxide, calcium oxalate, vinyl acetate, acetic acid, formic acid, formaldehydes, carbon monoxide, and carbon dioxide.

Special fire-fighting procedures/equipment

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

- Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.

Fire hazards/conditions of flammability

- : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS)

- : Not flammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
- Emergency Procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.
- Methods and materials for containment and cleaning up** : Ventilate area of release. Eliminate all ignition sources. Stop spill or leak at source if safely possible. Contain material, preventing it from entering sewer lines or waterways. Using HEPA vacuum, or other dustless methods, gather up spilled material and place in suitable container for later disposal (see Section 13). Avoid adding water, material becomes alkaline when wet. Notify the appropriate authorities as required.
- Prohibited materials** : Avoid adding water, material becomes alkaline when wet.
- Environmental precautions** : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.
- Reference to other sections** : See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

- Special instructions** : Mixing the product according to the directions in the Technical Data Sheet will produce airborne dusts, including crystalline silica. Wear a dust mask (N-95 or higher) while mixing. Use ventilation to control levels of dust in the work area.
- Safe handling procedures** : Corrosive! Wear chemically resistant protective equipment during handling. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product dust is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Do not breathe dust. Avoid contact with skin, eyes and clothing. Avoid wet or humid conditions. Keep away from acids and incompatibles. Avoid and control operations which create dust. Keep containers tightly closed when not in use. Wash thoroughly after handling.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Odor	: No odor	Odor threshold	: N/Av
pH	: 10 – 12	Specific gravity	: 2.7 – 3.1
Boiling point	: N/Av	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: < 55 g/L
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (<i>n</i>-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: N/Av
Volatile organic compounds (VOCs)	: 0 g/L		
Particle size	: N/Av	Flammability classification	: Not flammable
Flash point	: N/Av	Lower flammable limit (% by vol)	: Not available
Flash point method	: N/Av	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: Not available	Oxidizing properties	: Not available

Explosion data: Sensitivity to mechanical impact / static discharge

: Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Contact with water may cause hydration and formation of caustic calcium hydroxide.
Stability	: Stable under the recommended storage and handling conditions prescribed.
Hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: High temperatures.
Materials to avoid and incompatibility	: Oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin and Eyes</i> : Yes <i>Ingestion</i> : YES
Symptoms of exposure	: See Section 4.
Toxicological data	: There are no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Acute Toxicity Parameters for the Ingredients	CAS #	LC50, Inhalation mg/L, Rat, 4 hr	LD50, Oral mg/kg, rat	LD50, Dermal mg/kg, rabbit
Limestone	1317-65-3	N/Av	6,450	N/Av
Calcium aluminate	65997-16-2	N/Av	N/Av	N/Av
Calcium sulfate	7778-18-9	N/Av	> 3,000	NAv
Portland cement	65997-15-1	N/Av	N/Av	N/Av
Vinyl acetate copolymer	24937-78-8	N/Av	> 1,000	N/Av
Crystalline silica, quartz	14808-60-7	N/Av	N/Av	N/Av

Skin corrosion or irritation	: Causes skin corrosion when wet.
Serious eye damage / eye irritation	: Causes eye burns. May cause blindness.

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- Respiratory or skin sensitization** : Portland cement may cause an allergic skin reaction, in hypersensitive individuals possibly due to trace amounts of chromium.
- Germ cell mutagenicity** : None known.
- Carcinogenic status** : This product contains Crystalline silica. Crystalline silica (respirable size) is classified as carcinogenic by inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive toxicity** : None known.
- Specific Target Organ Toxicity, Single Exposure** : May cause respiratory irritation.
- Specific Target Organ Toxicity, Repeated Exposure** : May cause lung damage upon repeated or prolonged exposure.
- Aspiration hazard** : None known.
- Additional information** : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicological** : No data is available on the product itself.
- Ecotoxicity** : No data available.
- Biodegradability** : No data available.
- Bioaccumulative potential** : No data available.
- Mobility in soil** : No data available.
- PBT and vPvB assessment** : No data available.
- Other adverse effects** : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7.
- Methods of disposal** : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- Packaging** : Handle contaminated packaging in the same manner as the product.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional Information	None				

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

Canadian WHMIS Classification: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL). It contains a component listed on the Canadian HPA Ingredient Disclosure List above the *de minimus* amount on the IDL. It contains Crystalline silica.

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: Warning! This product contains a chemical known to the State of California to cause cancer. It contains Crystalline silica, quartz.

Other State Right to Know Laws:

Ingredient on State RTK Law?	CAS #	CA	MA	MN	NJ	PA	RI
Limestone	1317-65-3	No	YES	No	YES	YES	YES
Portland cement	65997-15-1	No	YES	No	YES	YES	YES
Calcium sulfate	7778-18-9	No	YES	No	YES	YES	No
Crystalline silica, quartz	14808-60-7	No	YES	YES	YES	YES	YES

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *3 Flammability 0 Physical Hazard 1* PPE: G
 Gloves, safety glasses, and dust respirator

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
 CAS: Chemical Abstract Services
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
 CFR: Code of Federal Regulations
 DOT: Department of Transportation
 DSL: Domestic Substances List
 EPA: Environmental Protection Agency
 IARC: International Agency for Research on Cancer
 Inh: Inhalation
 N/Av: Not Available
 N/Ap: Not Applicable
 NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. ARDEX Engineered Cements will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Safety Data Sheet is valid for three (3) years.

Prepared By:
ARDEX Engineered Cements
400 Ardex Park Drive
Aliquippa, PA, U.S.A.
15001

(724) 203-5000
Visit our Website: <http://www.ardexamericas.com>

Revision date: : 24-Sep-2014

End of Document

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : **ARDEX P 82 ULTRA PRIME - Resin (Part A)**
Chemical Name : N/Ap Chemical Family : Mixture
Chemical Formula` : N/Ap Trade Name/Synonyms : ARDEX P 82 Resin
Molecular Weight : N/Ap Material Use : Epoxy resin for primer

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification : Skin sensitizer, Category 1.
Eye irritant, Category 2B.
Skin irritant, Category 2.
Specific Target Organ Toxicity (Single Exposure) Category 3, Respiratory

WHMIS Classification : Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

GHS Pictograms :



Signal Word : Warning

Hazard Statements : Causes eye irritation.
May cause an allergic skin reaction.
May cause skin and respiratory irritation.

Precautionary Statements : Do not get in eyes, on skin or on clothing. Avoid breathing vapors or dust. Avoid prolonged contact with skin. Use outdoors or in well-ventilated area. If on skin, wash with soap and water. If skin irritation or rash occurs, get medical attention/advice. Wash thoroughly with soap and water after handling. Contaminated work clothes must not be allowed out of the workplace. Wash contaminated clothing before reuse. Keep container tightly closed. Store in a well-ventilated place. Store locked up. Dispose of contents/container according to local/regional/national regulations. Do not pour product down drains.

During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 (Handling and Storage) for further details.

Hazards Not Otherwise Classified: None

% With Unknown Acute Toxicity : Up to 35% by weight of this product is comprised of ingredients with unknown acute dermal toxicity.
Up to 50% by weight of this product is comprised of ingredients with unknown acute inhalation toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Limestone	1317-65-3	10.00 – 30.00
2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane epoxy resin	25068-38-6	5.00 – 10.00
Aliphatic glycidyl ether	2461-15-6	1.00 – 5.00
Phenol, polymer with formaldehyde, glycidyl ether	28064-14-4	1.00 – 5.00
Crystalline silica	14808-60-7	0.10 – 1.00

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 4 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If not breathing, clear airway and start artificial respiration. Seek immediate medical attention/advice.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
- Eye contact** : Immediately flush eyes thoroughly with running water for at least 20 to 30 minutes. Seek immediate medical attention/advice.
- Ingestion** : Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting. Have victim drink one to two glasses of water. Seek immediate medical attention/advice.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : May cause minor, temporary irritation to respiratory tract. Symptoms may include coughing and shortness of breath.
- Skin* : May cause skin irritation. Symptoms may include redness and itching. Prolonged or repeated overexposure to dusts/vapors may cause skin sensitization.
- Eyes* : Causes moderate irritation to eyes. Symptoms may include redness, itching, blurred vision or pain.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur.

Effects of long-term (chronic) exposure

- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath. Some individuals may experience a sensitization reaction of the skin after an initial exposure. Subsequent exposures may cause a hypersensitive skin reaction (rash, swelling).

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any exposure to the eye which causes irritation.
Blue color of the skin (cyanotic) after exposure.
Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, appropriate foam or water fog.
- Unsuitable extinguishing media** : water jet

Hazardous combustion products : Carbon monoxide, carbon dioxide, and other toxic vapors and gases that are common to thermal degradation of organic compounds.

Special fire-fighting procedures/equipment

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

Environmental precautions : Do not allow material to enter drains or contaminate ground water system.

Fire hazards/conditions of flammability

: Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.

Flammability classification (OSHA 29 CFR 1910.1200, WHMIS)

: Not flammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions : IRRITANT. Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.

Protective equipment : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Emergency Procedures : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).

US CERCLA Reportable quantity (RQ): None reported.

Methods and materials for containment and cleaning up

: Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

Prohibited materials : Avoid strong oxidizing agents

Environmental precautions : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections : See Section 14 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures : IRRITANT. Observe good hygiene standards. Use only with adequate ventilation. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Avoid contact with skin and eyes. Avoid repeated or prolonged skin contact. Avoid breathing vapors or mists of this product. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed.

Storage requirements : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials : See Section 10.

Special packaging materials : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
Limestone	1317-65-3	N/Av	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable)	N/Av
2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane epoxy resin	25068-38-6	N/Av	N/Av	N/Av	N/Av
Aliphatic glycidyl ether	2461-15-6	N/Av	N/Av	N/Av	N/Av
Phenol, polymer with formaldehyde, glycidyl ether	28064-14-4	N/Av	N/Av	N/Av	N/Av
Crystalline silica	14808-60-7	0.025 mg/m ³ (respirable fraction)	N/Av	0.1 mg/m ³ (respirable) (Final rule limit)	N/Av

Engineering Controls : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

Personal Protection Equipment

Eye / face protection : Chemical goggles must be worn when using this product. Additionally, a face shield is recommended if splashing is possible.

Skin protection : Wear chemical resistant protective clothing and impervious gloves. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection : Under normal conditions of use with adequate ventilation, respiratory protection should not be necessary. If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.

Site safety equipment : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations : Avoid contact with eyes, skin and clothing. Do not breathe vapors/dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid	Appearance	: Pink liquid
Odor	: slight	Odor threshold	: N/Av
pH	: N/Av	Specific gravity	: 1.17 – 1.20
Boiling point	: 212°F (100°C)	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: Miscible
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: 35 - 40
Volatile organic compounds (VOCs)	: 10.8 g/L (A + B) ASTM D2369		
Particle size	: N/Av	Flammability classification	: Not flammable
Flash point	: >212°F (100°C)	Lower flammable limit (% by vol)	: Not available
Flash point method	: Setflash closed	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: Not available	Oxidizing properties	: Not available
Explosion data: Sensitivity to mechanical impact / static discharge			
	: Not expected to be sensitive to mechanical impact or static discharge.		

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

- Reactivity** : Reacts with ammonia and amines. Reaction releases heat.
- Stability** : Stable under the recommended storage and handling conditions prescribed.
- Hazardous reactions** : Hazardous polymerization does not occur.
- Conditions to avoid** : High temperatures.
- Materials to avoid and incompatibility** : Oxidizing agents.
- Hazardous decomposition products** : None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

- Routes of exposure** : *Inhalation*: YES *Skin Absorption*: NO *Skin and Eyes*: Yes *Ingestion*: YES
- Symptoms of exposure** : See Section 4.
- Toxicological data** : There are no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr)		
	Inhalation, rat	Oral, rat	LD50 Dermal, rabbit
Limestone	N/Av	6450 mg/kg	N/Av
2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane	N/Av	13600 mg/kg	> 6000 mg/kg
Aliphatic glycidyl ether	N/Av	7800 mg/kg	N/Av
Phenol, polymer with formaldehyde, glycidyl ether	N/Av	> 5000 mg/kg	4000 mg/kg
Crystalline silica	N/Av	N/Av	N/Av

- Skin corrosion or irritation** : May cause irritation to skin.
- Serious eye damage / eye irritation** : Moderately irritating to eyes.
- Respiratory or skin sensitization** : Contains a component which is known to cause skin sensitization reactions.
- Germ cell mutagenicity** : Contains components which have tested positive for mutagenicity in standard Ames tests.
- Carcinogenic status** : This product contains Crystalline silica. Crystalline silica (respirable size) is classified as carcinogenic by inhalation by IARC (Group 1), ACGIH (Group A2), NTP (Group 1) and OSHA (OSHA Select carcinogen). During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 for more information. No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive toxicity** : None known.
- Specific Target Organ Toxicity, Single Exposure** : May cause respiratory irritation.
- Specific Target Organ Toxicity, Repeated Exposure** : None known.
- Aspiration hazard** : None known.
- Additional information** : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicological** : No data is available on the product itself. Information on components is listed below.

2,2-bis(4-hydroxyphenyl)propane, polymer with (chloromethyl)oxirane [CAS # 25068-38-6]

Ecotoxicity	: No data available.
Biodegradability	: Not readily biodegradable.
Bioaccumulative potential	: No data available.
Mobility in soil	: No data available.
PBT and vPvB assessment	: No data available.
Other adverse effects	: Toxic to aquatic life with long lasting effects.

Aliphatic glycidyl ether [CAS # 2461-15-6]

Ecotoxicity	: No data available.
Biodegradability	: No data available.
Bioaccumulative potential	: No data available.
Mobility in soil	: No data available.
PBT and vPvB assessment	: No data available.
Other adverse effects	: No data available.

Phenol, polymer with formaldehyde, glycidyl ether [CAS # 28064-14-4]

Ecotoxicity	: LC50 – Carassius auratus (goldfish) – 14 mg/L – 24 hr
Biodegradability	: No data available.
Bioaccumulative potential	: No data available.
Mobility in soil	: No data available.
PBT and vPvB assessment	: No data available.
Other adverse effects	: No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal	: Handle waste according to recommendations in Section 7.
Methods of disposal	: You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
Packaging	: Handle contaminated packaging in the same manner as the product.
RCRA	: If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional Information	None				

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

Canadian WHMIS Classification: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non- Domestic Substances List (NDSL). It contains no components above the *de minimus* level on the Canadian HPA Ingredient Disclosure List.

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: Warning! This product contains a chemical known to the State of California to cause cancer and/or reproductive/developmental effects.

Other State Right to Know Laws: Limestone [CAS# 1317-65-3] (MA, MN, NJ, PA, RI); Crystalline silica [CAS# 14808-60-7] (MA, MN, NJ, PA, RI).

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *2 Flammability 0 Reactivity 0 PPE: Gloves, safety glasses*

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
IARC: International Agency for Research on Cancer
Inh: Inhalation
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

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14-Jul-2014

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may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. ARDEX Engineered Cements will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three (3) years.

Prepared By:
ARDEX Engineered Cements
400 Ardex Park Drive
Aliquippa, PA, U.S.A.
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(724) 203-5000
Visit our Website: <http://www.ardexamericas.com>

Revision date: : 14-Jul-2014

End of Document

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:



ARDEX Engineered Cements
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (724) 203-5000
Website Address : <http://www.ardexamericas.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : ARDEX P 82™ ULTRA PRIME Hardener (Part B)
Chemical Name : N/Ap Chemical Family : Mixture
Chemical Formula` : N/Ap Trade Name/Synonyms : ARDEX P 82 Hardener
Molecular Weight : N/Ap Material Use : Epoxy hardener for primer

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification : Skin Sensitization 1
Eye Irritation 2A
Skin Irritation 2
STOT SE 3, Respiratory

WHMIS Classification : This material is a controlled product under the criteria specified in the Canadian Workplace Hazardous Materials Information System (WHMIS) Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

Material Description : White liquid with amine odor.

GHS Pictograms :



Signal Word : Warning

Hazard Statements : Causes severe eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements : Do not get in eyes, on skin or on clothing. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Clean contaminated clothing before reuse. Store in a well-ventilated place. Store in a closed container. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.

Hazards not otherwise classified : None.

% With Unknown Acute Toxicity : Up to 5% by weight of this product is comprised of ingredients with unknown acute dermal toxicity.

Up to 15% by weight of this product is comprised of ingredients with unknown acute inhalation toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
Triethylenetetramine	112-24-3	1.00 – 5.00
Isophoronediamine	2855-13-2	1.00 – 5.00
Benzyl alcohol	100-51-6	1.00 – 5.00

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 4 – FIRST AID MEASURES

- Inhalation** : If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If not breathing, clear airway and start artificial respiration. Seek immediate medical attention/advice.
- Skin contact** : Remove/Take off immediately all contaminated clothing. Flush affected skin with gently flowing lukewarm water for at least 20 minutes. Seek immediate medical attention/advice.
- Eye contact** : Immediately flush eyes thoroughly with running water for at least 20 to 30 minutes. Seek immediate medical attention/advice.
- Ingestion** : Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting. Have victim drink one to two glasses of water. Seek immediate medical attention/advice.
- Notes for Physician** : Treat symptomatically.
- Signs and symptoms of short-term (acute) exposure**
- Inhalation* : May cause irritation to the respiratory system producing coughing and difficulty breathing.
- Skin* : May cause irritation to skin, with redness, itching, and swelling. Contains components which are easily absorbed through the skin. Repeated or prolonged contact may cause an allergic skin reaction.
- Eyes* : Causes severe irritation to the eyes.
- Ingestion* : May cause irritation to the mouth, throat and digestive tract.

Effects of long-term (chronic) exposure

- : Prolonged inhalation of concentrated vapors can cause headaches, nausea, vomiting, and other symptoms of central nervous system (CNS) depression. Some individuals may experience a sensitization reaction of the skin after an initial exposure. Subsequent exposures may cause a hypersensitive skin reaction (rash, swelling).

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any exposure to the eye which causes irritation.
Blue color of the skin (cyanotic) after exposure.
Ingestion.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Use extinguishing media appropriate for surrounding materials.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, nitrogen oxides, and/or low molecular weight hydrocarbons and amines.
- Special fire-fighting procedures/equipment**
- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment

exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.

Flammability classification (OSHA 29 CFR 1910.1200) and WHMIS

: Nonflammable

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : See Section 7 for safe handling procedures. Wear chemically resistant personal protective equipment during cleanup. Restrict access to area until completion of clean-up. All persons dealing with clean-up must be properly trained and wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for information on acceptable personal protective equipment.
- Emergency procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.
- Spill response / clean-up** : Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal. Notify the appropriate authorities as required.
- Environmental precautions** : Do not allow product to enter waterways. Do not allow material to contaminate ground water system.
- Disposal** : See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

- Safe handling procedures** : Avoid contact with eyes, skin or clothing. Avoid breathing vapors. Do not swallow. Observe good hygiene standards. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed. Use only with adequate ventilation.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.
- Incompatible materials** : See Section 10.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits : No exposure limits have been established for the product. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TLV	STEL	PEL	STEL
Triethylenetetramine	112-24-3	N/Av	N/Av	N/Av	N/Av
				1 ppm US WEEL	
Isophoronediamine	2855-13-2	N/Av	N/Av	N/Av	N/Av
Benzyl alcohol	100-51-6	N/Av	N/Av	N/Av	N/Av
				10 ppm US WEEL	

- Engineering controls** : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.
- Personal Protection Equipment**
- Eye / face protection** : Chemical goggles must be worn when using this product. A face shield is recommended if splashing is possible.

- Skin protection** : Wear chemical resistant protective clothing and impervious gloves. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.
- Body protection** : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.
- Respiratory protection** : If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.
- Site safety equipment** : An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene considerations** : Avoid contact with eyes, skin and clothing. Do not breathe vapors/dust. Do not eat, drink or smoke when using this product. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|---|-----------------------------|---|--------------|
| Physical state | : Liquid | Appearance | : White |
| Odor | : Amine | Odor threshold | : N/Av |
| pH | : < 11.50 | Specific gravity | : 1.20 |
| Boiling point | : 212°F (100°C) | Coefficient of water/oil distribution | : N/Av |
| Melting/Freezing point | : N/Av | Solubility in water | : Immiscible |
| Vapor pressure (mm Hg @ 20°C / 68°F) | : N/Av | Evaporation rate (n-Butyl acetate = 1) | : N/Av |
| Vapor density (Air = 1) | : N/Av | Volatiles (% by weight) | : N/Av |
| Volatile organic compounds (VOCs) | : A+B, 10.8 g/L, ASTM D2369 | | |
| Flammability classification | : Nonflammable | Decomposition temperature | : N/Av |
| Flash point | : >200°F (>93.3°C) | Lower flammable limit (% by vol) | : N/Av |
| Flash point method | : Setaflash closed | Upper flammable limit (% by vol) | : N/Av |
| Auto-ignition temperature | : N/Av | Oxidizing properties | : None |
| Flame projection length | : N/Av | Flashback observed | : N/Av |
- Explosion data: Sensitivity to mechanical impact / static discharge**
: Not expected to be sensitive to mechanical impact or static discharge.
- Viscosity** : N/Av

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

- Stability** : Stable under the recommended storage and handling conditions prescribed.
- Reactivity** : Reacts with epoxides. Reaction releases heat.
- Hazardous polymerization** : Hazardous polymerization does not occur.
- Conditions to avoid** : Avoid prolonged exposure to heat.
- Materials to avoid and incompatibility**
: Oxidizing agents.
- Hazardous decomposition products**
: Refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

- Routes of exposure** : *Inhalation*: YES *Skin Absorption*: YES *Skin and Eyes*: Yes *Ingestion*: YES
- Symptoms of exposure** : See Section 4.
- Toxicological data** : There are no available data for the product itself, only for the ingredients. Based on individual components, this product is an irritant to skin and eyes, and can cause sensitization by skin contact. See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr) Inhalation, rat	LD50	
		Oral, rat	Dermal, rabbit
Triethylenetetramine	N/Av	2500 mg/kg	550 mg/kg

Isophoronediamine	N/Av	1030 mg/kg	N/Av
Benzyl alcohol	N/Av	1230 mg/kg	2000 mg/kg

- Skin corrosion or irritation** : Causes irritation to skin.
Serious eye damage / eye irritation : Causes severe irritation to eyes.
Respiratory or skin sensitization : Contains components which are known to cause skin sensitization reactions.
Germ cell mutagenicity : None known.
Carcinogenic status : No components are listed as carcinogens by ACGIH, IARC, OSHA, NIOSH or NTP.
Reproductive toxicity : None known.
Specific Target Organ Toxicity, Single Exposure : May cause respiratory irritation.
Specific Target Organ Toxicity, Repeated Exposure : None known.
Aspiration hazard : None known.
Additional information : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
Ecotoxicological : No data is available on the product itself. Information on components is listed below.

Benzyl alcohol (100-51-6)

Test & Species	Results & Conditions
96 Hr LC50 Pimephales promelas	460 mg/L [static]
96 Hr LC50 Lepomis macrochirus	10 mg/L [static]
3 Hr EC50 Anabaena variabilis	35 mg/L
48 Hr EC50 Daphnia magna	23 mg/L

Isophoronediamine (2855-13-2)

Test & Species	Results & Conditions
96 Hr LC50 Leuciscus idus	110 mg/L
72 Hr EC50 Desmodemus subspicatus	37 mg/L
48 Hr EC50 Daphnia magna	17.4 mg/L

- Persistence and degradability** : Not Available.
Bioaccumulative potential : Not Available.
Mobility in soil : Not Available.
PBT and VPVB assessments : Not Available.
Other Adverse Effects : Material is alkaline and should not be discharged into sewers or waterways.

SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7. Empty containers retain residue (liquid and vapor).
Methods of disposal : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
Disposal Information : Waste must be handled in accordance with all local regulations. In case of large spills, follow all facility Emergency Response Procedures. Do not allow this material to enter sewers/water supplies. Do not reuse containers. Dispose of container and any unused contents in accordance with local regulations.
RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the

responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	Not regulated.	Not regulated.	None	
TDG Additional Information	None				
49 CFR/DOT	None	Not regulated.	Not regulated.	None	
49 CFR/DOT Additional Information	None				

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

Canadian WHMIS Classification: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL). It contains the following components on the Canadian HPA Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Triethylenetetramine	112-24-3	0.1 %
Benzyl alcohol	100-51-6	1 %
Isophoronediamine	2855-13-2	1 %

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

U.S. State Right To Know Laws

California Proposition 65: This product contains chemicals known to the State of California to cause cancer and/or reproductive effects.

Other State Right to Know Laws:

Component	CAS	CA	MA	MN	NJ	PA	RI
Triethylenetetramine	112-24-3	No	Yes	No	Yes	Yes	No
Benzyl alcohol	100-51-6	No	Yes	Yes	No	Yes	No

Isophoronediamine	2855-13-2	No	No	Yes	Yes	No	No
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SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *2 Flammability 0 Reactivity 0*
 Recommended PPE: Gloves, safety glasses with side shields, protective clothing

Legend :

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- DSL: Domestic Substances List
- EPA: Environmental Protection Agency
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- N/Av: Not Available
- N/Ap: Not Applicable
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TSCA: Toxic Substance Control Act
- TWA: Time Weighted Average
- WEEL: Workplace Environmental Exposure Level
- WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product. No warranty of any kind is given or implied. ARDEX Engineered Cements will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three (3) years.

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 Visit our Website: <http://www.ardexamericas.com>

Revision date: : 14-Jul-2014

End of Document



SAFETY DATA SHEET
S-310 ROLL STRONG™ ADHESIVE

Version 2.0 Revision Date: 09/20/2017 MSDS Number: F000001824 Date of last issue: 06/10/2015
Date of first issue: 05/20/2015

SECTION 1. IDENTIFICATION

Product name : S-310 ROLL STRONG™ ADHESIVE

Product code : F000001824

Manufacturer or supplier s details

Company name of supplier : Armstrong Flooring, Inc.

Address : P.O. Box 3025
Lancaster, PA 17603

Telephone : (800) 233-3823

Website : <http://www.floorexpert.com>

Emergency telephone number : CHEM-TEL: 1-800 255-3924 or +01-813-248-0585 (call collect)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

This adhesive contains 0 g/L VOC (Volatile Organic Compounds).

This product does not contain any ingredients that are on the Living Building Challenge's list of Red List materials and chemicals (developed by the International Living Building Institute).

SECTION . COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

No hazardous ingredients

SECTION . FIRST AID MEASURES

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- If inhaled : Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Call a physician or poison control centre immediately.
 - In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
 - In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Seek medical advice.
 - If swallowed : Do not induce vomiting without medical advice. If conscious, drink plenty of water. Never give anything by mouth to an unconscious person.
 - Most important symptoms and effects, both acute and delayed : None known.
-

SECTION . FIREFIGHTING MEASURES

- Suitable extinguishing media : Foam
Carbon dioxide (CO₂)
ABC powder
Water mist
 - Specific hazards during fire-fighting : Burning produces irritant fumes. Exposure to decomposition products may be a hazard to health. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
 - Hazardous combustion products : Hazardous decomposition products due to incomplete combustion
 - Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
 - Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.
-

SECTION . ACCIDENTAL RELEASE MEASURES

S-310 ROLL STRONG™ ADHESIVE

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- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Material can create slippery conditions.
Use non-slip safety shoes in areas where spills or leaks can occur.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not let product enter drains.
Do not allow contact with soil, surface or ground water.
Do not allow uncontrolled discharge of product into the environment.
- Methods and materials for containment and cleaning up : Dam up.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up and shovel.
Pick up and transfer to properly labelled containers.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : The product is not flammable. No special protective measures against fire required.
- Advice on safe handling : Wear personal protective equipment.
Handle with care.
Take care to avoid waste and spillage when weighing, loading and mixing the product.
- Conditions for safe storage : No smoking.
Keep in properly labelled containers.
Observe label precautions.
Keep containers tightly closed in a dry, cool and well-ventilated place.
- Materials to avoid : Do not freeze.
Keep away from food and drink.
Keep away from tobacco products.
- Recommended storage temperature : 4 - 43 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with or place control parameters**

Contains no substances with occupational exposure limit values.

- Engineering measures** : Handle only in a place equipped with local exhaust (or other appropriate exhaust).

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Maintain air concentrations below occupational exposure standards.

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Use NIOSH approved respiratory protection.
- Hand protection
Material : Impervious gloves
- Eye protection : Safety glasses with side-shields
Tightly fitting safety goggles
Face-shield
- Skin and body protection : Chemical resistant apron
Footwear protecting against chemicals
Skin should be washed after contact.
Change working clothes after each workshift.
- Protective measures : Avoid contact with skin.
When using do not eat, drink or smoke.
Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene measures : Do not smoke.
Keep away from food and drink.
Avoid contact with skin, eyes and clothing.
Change working clothes after each workshift.
Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : white
- Odour : mild, characteristic
- pH : No data available
- Melting point/range : No data available
- Boiling point/boiling range : 212 °F

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Flash point	:	> 212 °F
Vapour pressure	:	No data available
Density	:	No data available
Bulk density	:	8.2 lb/gal
Solubility(ies)	:	
Water solubility	:	dispersible
Solubility in other solvents	:	Not applicable
Partition coefficient: n-octanol/water	:	No data available
Explosive properties	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	Protect from frost.
Incompatible materials	:	Oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Remarks: This information is not available.

S in corrosion/irritation**Product:**

Remarks: This information is not available.

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Serious eye damage/eye irritation

Product:

Remarks: This information is not available.

Respiratory or skin sensitisation

Product:

Remarks: This information is not available.

Carcinogenicity

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product

Toxicity to fish :
Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates :
Remarks: No data available

Toxicity to algae :
Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available



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SECTION 1 . DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with local regulations.
Can be landfilled or incinerated, when in compliance with local regulations.
- Contaminated packaging : Clean container with water.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 1 . TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA DGR

Not regulated as a dangerous good

IMDG Code

Not regulated as a dangerous good

Transport in ul according to Annex II of MARPOL / and the IBC Code

Not applicable for product as supplied.

National Regulations**9 CFR**

Not regulated as a dangerous good

9 CFR

Not regulated as a dangerous good

SECTION 1 . REGULATORY INFORMATION

SARA 02 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 1 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA All components of this product appear on the Inventory of Chemical Substances published by the U.S. Environmental

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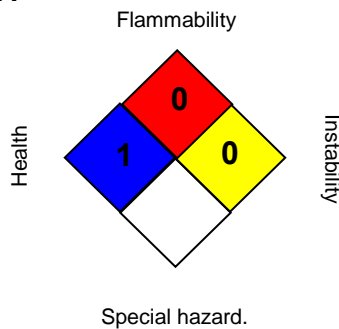
Date of last issue: 06/10/2015
Date of first issue: 05/20/2015

Protection Agency (EPA) under the authority of the Toxic Substances Control Act (TSCA).

SECTION 1 . OTHER INFORMATION

Further information

NFPA



HMIS III

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 09/20/2017

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
 Issue date: 2/23/2023 Revision date: 2/23/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : S-319 Roll Strong Adhesive

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Adhesives, binding agents
 Restrictions on use : None known

1.3. Supplier

AHF Products
 3840 Hempland Road
 Mountville, PA, 17554
 T (717) 251-1073

1.4. Emergency telephone number

Emergency number : 1-800-255-3924

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified.

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Potassium hydroxide	CAS-No.: 1310-58-3	0.1 – 1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

S-319 Roll Strong Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
------------------	--

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Not determined.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Do not handle until all safety precautions have been read and understood.
------------------	---

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area.
----------------------	----------------------------

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
----------------------	---

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

S-319 Roll Strong Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

S-319 Roll Strong Adhesive

No additional information available

Potassium hydroxide (1310-58-3)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL Ceiling	2 mg/m ³
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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Paste.

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Color	: White
Odor	: Slight
Odor threshold	: No data available
pH	: 8 – 8.5
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.05
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Extremely high temperatures.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

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Potassium hydroxide (1310-58-3)	
LD50 oral rat	284 mg/kg
ATE US (oral)	284 mg/kg body weight
Skin corrosion/irritation	: Not classified. pH: 8 – 8.5
Serious eye damage/irritation	: Not classified. pH: 8 – 8.5
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Viscosity, kinematic	: No data available
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Potassium hydroxide (1310-58-3)	
Partition coefficient n-octanol/water (Log Pow)	0.65

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

S-319 Roll Strong Adhesive

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
 Proper Shipping Name (TDG) : Not applicable
 Proper Shipping Name (IMDG) : Not applicable
 Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

DOT
 Transport hazard class(es) (DOT) : Not applicable

IMDG
 Transport hazard class(es) (IMDG) : Not applicable

IATA
 Transport hazard class(es) (IATA) : Not applicable

14.4. Packing group

Packing group (DOT) : Not applicable
 Packing group (IMDG) : Not applicable
 Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
 No data available

IMDG
 No data available

IATA
 No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

S-319 Roll Strong Adhesive

SARA Section 311/312 Hazard Classes	None
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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Potassium hydroxide (1310-58-3)	
CERCLA RQ	1000 lb

15.2. International regulations

No additional information available

15.3. US State regulations

 **WARNING:** This product can expose you to Ethylene oxide, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Potassium hydroxide(1310-58-3)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 02/23/2023

Full text of H-phrases	
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

Safety Data Sheet (SDS), USA - HSI

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable



SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : **Armstrong S Premium Plus Commercial Sheet Flooring Adhesive**

Product Code : 70012273

Trade Name/Synonyms : S-543

Recommended Use : Adhesive for installing Vinyl Sheet Flooring

Uses Advised Against : No information available.

Supplier's name and address
Armstrong World Industries, Inc.
2500 Columbia Ave.
Lancaster, PA, USA 17603

Information Telephone No. : (800) 233-3823

Website Address : <http://www.floorexpert.com>

2 Hr Emergency Telephone : CHEM TEL 1 002 92 OR 1 1 2 0 (call collect)

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 201)

Not classified as hazardous

GHS Pictograms

None.

Signal Word

None.

Hazard Statements

None.

Safe Handling Instructions

Avoid eye and skin contact. It is recommended to use safety glasses and gloves during handling. During installation process, adequate ventilation of the work area should be maintained. Although the adhesive is low VOC, persons who are sensitive to odors or chemicals should avoid the work area during installation. Keep container closed.

Hazards Not Otherwise Classified

None.

% With Unknown Acute Toxicity :

5% by weight of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
No hazardous ingredients	N/Ap	100

SECTION 4 – FIRST AID MEASURES

General : Call a doctor if you feel unwell.



- Inhalation** : If a worker develops breathing problems while working with this material, remove the worker to fresh air and keep at rest in a position comfortable for breathing.
- S in contact** : Wash with plenty of soap and water. If irritations or symptoms develop, seek medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short term (acute) exposure

- Inhalation* : None known.
- Skin* : Symptoms may include mild redness or itching.
- Eyes* : Symptoms may include mild redness, itching, or pain.
- Ingestion* : None known.

Effects of long term (chronic) exposure

- : None known.

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
- : Any exposure to the eye which causes irritation.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, alcohol foam or water spray.
- Unsuitable extinguishing media** : Water jet may spread the burning material.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, as well as other toxic vapors and gases which are common to thermal degradation of organic compounds.
- Special fire fighting procedures/equipment** : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.
- Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.
- Fire hazards/conditions of flammability** : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.
- Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 201)** : Not flammable.
- NFPA Rating** : 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: 1 Flammability 1 Instability 0 Special Hazards: None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
- Emergency Procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.



Methods and materials for containment and cleaning up

- : Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

Prohibited materials

- : None known.

Environmental precautions

- : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections

- : See Section 14 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures

- : Wear suitable protective equipment during handling. (See Section 8.) Observe good hygiene standards. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes, skin, or clothing. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Keep container tightly closed.

Storage requirements

- : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials

- : See Section 10.

Special packaging materials

- : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits

- : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
No hazardous ingredients	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap

Engineering Controls

- : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.

Personal Protection Equipment

Eye / face protection

- : Chemical goggles or safety glasses, as appropriate for the job.

Skin protection

- : Wear gloves which are impervious to the material. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection

- : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection

- : Under normal conditions of use with adequate ventilation, respiratory protection should not be necessary. If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.

Site safety equipment

- : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

- : Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dust. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands thoroughly. Remove soiled clothing and wash it thoroughly before reuse. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES



Physical state	: Paste	Appearance	: Off-white paste
Odor	: Mild	Odor threshold	: N/Av
pH	: 8.0 – 9.0	Specific gravity	: 1.05
Boiling point	: 212°F (100°C)	Coefficient of ater/oil distri ution	: N/Av
Melting/Freezing point	: N/Av	Solu ility in ater	: Dispersible
Vapor pressure (mm Hg 20 C / F)	: N/Av	Evaporation rate (n Butyl acetate 1)	: N/Av
Vapor density (Air 1)	: N/Av	Volatiles (% y eight)	: Approximately 34 – 35%
Volatile organic compounds (VOCs)	: 0 g/L SCAQMD 1168		
Particle size	: N/Av	Flamma ility classification	: Not flammable
Flash point	: >146°C (>295°F)	Lo er flamma le limit (% y vol)	: Not available
Flash point method	: Setaf flash closed	Upper flamma le limit (% y vol)	: Not available
Auto ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: 90,000 cSt	O idizing properties	: Not available

Explosion data Sensitivity to mechanical impact / static discharge

Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Not reactive.
Stability	: Stable under the recommended storage and handling conditions prescribed.
Hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Extreme heat.
Materials to avoid and incompatibility	: Strong oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure : *Inhalation*: YES *Skin Absorption*: NO *Skin and Eyes*: Yes *Ingestion*: YES

Symptoms of exposure : See Section 4.

Calculated Acute Toxicity Estimates for the Product

<i>Inhalation</i>	: > 50 mg/L
<i>Oral</i>	: > 5000 mg/kg
<i>Dermal</i>	: > 5000 mg/kg

Toxicological data : See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr)		LD50	
	Inhalation, rat	Oral, rat	Dermal, rabbit	
No hazardous ingredients.	N/Av	N/Av	N/Av	

Skin corrosion or irritation	: May cause mild irritation to skin.
Serious eye damage / eye irritation	: May cause mild, temporary irritation to eyes.
Respiratory or skin sensitization	: None known.
Germ cell mutagenicity	: None known.
Carcinogenic status	: No components are classified as carcinogenic by IARC, ACGIH, NTP, and OSHA.
Reproductive toxicity	: None known.
Specific Target Organ Toxicity, Single Exposure	: None known.
Specific Target Organ Toxicity, Repeated Exposure	: None known.



Aspiration hazard : None known.
Additional information : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

Environmental effects : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
Ecotoxicity : No data available.
Biodegradability : No data available.
Bioaccumulative potential : No data available.
Mobility in soil : No data available.
PBT and vPvB assessment : No data available.
Other adverse effects : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal : Handle waste according to recommendations in Section 7.
Methods of disposal : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
Packaging : Handle contaminated packaging in the same manner as the product.
RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packaging Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
9 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
9 CFR/DOT Additional Information	None				

SECTION 15 – REGULATORY INFORMATION

Canadian Information

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

US Federal Information



TSCA: All ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Not Hazardous.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Other State Right to Know Laws: Not applicable.

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: 1 Flammability 1 Physical Hazard: 0 PPE: Gloves, safety glasses

- Legend : ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- DSL: Domestic Substances List
- EPA: Environmental Protection Agency
- GHS: Globally Harmonized System
- HPR: Hazardous Products Regulations
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- N/Av: Not Available
- N/Ap: Not Applicable
- NIOSH: National Institute of Occupational Safety and Health
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TSCA: Toxic Substance Control Act
- TWA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. Armstrong World Industries, Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By
Armstrong World Industries, Inc.
2500 Columbia Ave.



Armstrong S-543 Premium Plus Commercial Sheet Flooring Adhesive
04-Mar-2015

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Page of

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Visit our Website: <http://www.floorexpert.com>

Revision date 04-Mar-2015

End of Document

Safety Data Sheet

Armstrong S-525 Biobased Tile Adhesive

Section 1. Identification

GHS product identifier : Armstrong S-525 Biobased Tile Adhesive
Physical state : Liquid.
Address : Armstrong Flooring, Inc.
2500 Columbia Ave
Lancaster, PA 17603
Contact : AFI Customer Service
Telephone : (800) 233-3823
In case of emergency : ChemTel
1-800-255-3924 or +01-813-248-0585 (call collect)

Date of revision : 1/25/2019
Safety Data Sheets are available online at : www.floorexpert.com

Chemical family : Adhesive.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2B

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes skin and eye irritation.

Precautionary statements

Prevention : Wear protective gloves. Wash hands thoroughly after handling.

Response : IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Section 2. Hazards identification

- Storage** : Not applicable.
- Disposal** : Not applicable.
- Hazards not otherwise classified** : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Resin acids and Rosin acids, potassium salts	1-5	61790-50-9
Dimethylethanolamine	0.1-1	108-01-0

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

Section 4. First aid measures

- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : No specific data.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Do not store below the following temperature: 0°C (32°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid. [Paste.]
- Color** : Beige.
- Odor** : Characteristic. [Slight]
- Odor threshold** : Not available.
- pH** : 9.6
- Melting point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: >93.333°C (>200°F) [Setaflash.]
- VOC (less water, less exempt solvents)** : 16.2 g/l
- Volatility** : 35.5% (w/w)
- Relative density** : 1.11

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Section 11. Toxicological information

Conclusion/Summary

- Skin** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Eyes** : This product may irritate eyes upon contact.
- Respiratory** : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

- Eye contact** : Causes eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-	-
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

U.S. Federal regulations

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2B

Composition/information on ingredients

No products were found.

State regulations


Massachusetts : The following components are listed: OIL MIST, MINERAL

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

 **WARNING:** This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Section 15. Regulatory information

Ingredient name	No significant risk level	Maximum acceptable dosage level
Naphthalene	Yes.	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

China : All components are listed or exempted.

United States TSCA 8(b) inventory : All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	2
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B	Expert judgment Expert judgment

History

Date of printing : 1/25/2019
Date of issue/Date of revision : 1/25/2019
Date of previous issue : 4/24/2018
Version : 1.01

Key to abbreviations : ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

☑ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : **Armstrong S 202 Static Dissipative Tile Adhesive**
 Product Code : 70010773
 Trade Name/Synonyms : S-202
 Recommended Use : Flooring adhesive for static dissipative tiles.
 Uses Advised Against : No information available.
Supplier's name and address
 Armstrong Flooring, Inc.
 2500 Columbia Ave.
 Lancaster, PA, USA 17603
 Information Telephone No. : (800) 233-3823
 Website Address : <http://www.floorexpert.com>
2 Hr Emergency Telephone : CHEM TEL 1 00 2 92 or +01-813-248-0585 (call collect)

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 201)
 Carcinogenicity, Category 2
 Specific target organ toxicity, single exposure; Narcotic effects Category 3
 Aspiration hazard, Category 2.

GHS Pictograms



Signal Word Warning.
Hazard Statements Suspected of causing cancer.
 May cause drowsiness or dizziness.
 May be harmful if swallowed and enters airways.

Precautionary Statements Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. Avoid breathing dust or vapours. Use only outdoors or in a well-ventilated area. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents / container in accordance with federal, state, and local laws. Do not allow product to enter drains.
 During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 (Handling and Storage) for further details.

Hazards Not Otherwise Classified None.

% with Un known Acute Toxicity None.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Carbon black	1333-86-4	3.00 – 7.00
Stoddard Solvent	8052-41-3	1.00 – 5.00
Vinyl acetate	108-05-4	0.10 – 0.50



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Armstrong Flooring, Inc.
2500 Columbia Ave.
Lancaster, PA USA 17603
Telephone: (800) 233-3823
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The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets.

SECTION 2 – FIRST AID MEASURES

- General** : Call a Poison Center or doctor if you feel unwell.
- Inhalation** : If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Skin in contact** : Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. If irritations or symptoms develop, seek medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short term (acute) exposure

- Inhalation* : Symptoms may include coughing and shortness of breath. Exposure to high vapour concentration can cause dizziness, nausea and central nervous system depression.
- Skin* : Symptoms may include redness and itching.
- Eyes* : Symptoms may include redness, itching, or pain.
- Ingestion* : Symptoms such as gastric pain, nausea, vomiting, and diarrhea may occur. If large amounts are ingested, symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects.

Effects of long term (chronic) exposure

- : Prolonged inhalation may cause adverse lung effects with symptoms including coughing and shortness of breath.

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any exposure to the eye which causes irritation.

SECTION 2 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, alcohol foam or water spray.
- Unsuitable extinguishing media** : Water jet.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, nitrogen oxides (NO_x) and other toxic vapors and gases which are common to thermal degradation of organic compounds.
- Special fire fighting procedures/equipment** : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.
- Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.
- Fire hazards/conditions of flammability** : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Ammonia gas may be liberated at high temperatures.
- Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)** : Not flammable under normal conditions of handling.
- NFPA Rating** : 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: 1 Flammability 1 Instability 0 Special Hazards: None

SECTION 7 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
- Emergency Procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
 US CERCLA Reportable quantity (RQ): Vinyl acetate: 5000 lbs.
- Methods and materials for containment and cleaning up** : Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.
- Prohibited materials** : Avoid strong oxidizing agents
- Environmental precautions** : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.
- Reference to other sections** : See Section 14 for disposal information.

SECTION 8 – HANDLING AND STORAGE

- Safe handling procedures** : Observe good hygiene standards. Use only with adequate ventilation. Do not eat, drink or smoke in the work area. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Avoid repeated or prolonged skin contact. Avoid breathing vapors or mists of this product. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Wear protective clothing to prevent skin contact. Promptly remove any clothing that becomes contaminated. Clean contaminated clothing before reuse. Keep container tightly closed.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.
- Incompatible materials** : See Section 10.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 9 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
Carbon black	1333-86-4	3.0 mg/m ³ (inhalable)	N/Av	3.5 mg/m ³	N/Av
Stoddard Solvent	8052-41-3	100 ppm	N/Av	500 ppm	N/Av
Vinyl acetate	108-05-4	10 ppm	15 ppm	10 ppm	20 ppm (final rule limits)

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- Engineering Controls** : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.
- Personal Protection Equipment**
 - Eye / face protection** : Chemical goggles or safety glasses, as appropriate for the job.
 - Skin protection** : Wear gloves which are impervious to the material. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended. Consult with glove manufacturers regarding breakthrough time for this material.
 - Body protection** : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.
 - Respiratory protection** : If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.
- Site safety equipment** : An eyewash station and safety shower should be made available in the immediate working area.
- General hygiene considerations** : Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dust. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands thoroughly. Remove soiled clothing and wash it thoroughly before reuse. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- | | | | |
|--|----------------------|---|-----------------|
| Physical state | : Paste | Appearance | : Black paste |
| Odor | : Ammonia odor | Odor threshold | : N/Av |
| pH | : 9.5 | Specific gravity | : 1.02 |
| Boiling point | : 212°F (100°C) | Coefficient of water/oil distribution | : N/Av |
| Melting/Freezing point | : N/Av | Solubility in water | : Appreciable |
| Vapor pressure (mm Hg @ 20 C / F) | : N/Av | Evaporation rate (n Butyl acetate @ 1) | : N/Av |
| Vapor density (Air @ 1) | : N/Av | Volatiles (% by weight) | : 40 % |
| Volatile organic compounds (VOCs) | : 50 g/L SCAQMD 1168 | | |
| Particle size | : N/Av | Flammability classification | : Not flammable |
| Flash point | : >93.3°C (200°F) | Lower flammable limit (% by vol) | : Not available |
| Flash point method | : Setflash closed | Upper flammable limit (% by vol) | : Not available |
| Auto ignition temperature | : N/Av | Decomposition temperature | : Not available |
| Viscosity | : Not available | Oxidizing properties | : Not available |
- Explosion data Sensitivity to mechanical impact / static discharge**
 Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

- Reactivity** : Not reactive.
- Stability** : Stable under the recommended storage and handling conditions prescribed.
- Hazardous reactions** : Hazardous polymerization does not occur.
- Conditions to avoid** : High temperatures.
- Materials to avoid and incompatibility** : Strong oxidizing agents; Acids; halogenated compounds.
- Hazardous decomposition products** : None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure : *Inhalation:* YES *Skin Absorption:* NO *Skin and Eyes:* Yes *Ingestion:* YES

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Symptoms of exposure : See Section 4.

Calculated Acute Toxicity Estimates for the Product

- Inhalation* : > 30 mg/L
- Oral* : > 3000 mg/kg
- Dermal* : > 3000 mg/kg

Toxicological data : See below for individual ingredient acute toxicity data.

Ingredients	LD50		
	LC50 (4 hr) Inhalation, rat	Oral, rat	Dermal, rabbit
Carbon black	6750 mg/m ³	> 15,400 mg/kg	> 3000 mg/Kg
Stoddard Solvent	> 5500 mg/m ³	> 5000 mg/kg	> 3000 mg/kg
Vinyl acetate	3250 – 4100 ppm	2900 mg/kg	2300 mg/kg

- Skin corrosion or irritation** : May cause slight irritation to skin.
- Serious eye damage / eye irritation** : May cause slight irritation to eyes.
- Respiratory sensitization** : Not expected to cause skin or respiratory sensitization reactions.
- Germ cell mutagenicity** : Contains Carbon black. Test results for Carbon black are:
 - Ames test (*S. typhimurium*) – Result: negative
 - Hamster (ovary) – Result: negative
 - DNA repair (rat, female) – Result: negative

Carcinogenic status : This product contains Carbon black and Vinyl acetate. Carbon black and Vinyl acetate are each classified as possibly carcinogenic to humans by IARC (Group 2B) based on rat inhalation studies. ACGIH has classified Carbon black as not classifiable as a human carcinogen (Group A4). ACGIH has classified Vinyl acetate as a proven animal carcinogen (Group A3). NTP and OSHA have not classified Carbon black or Vinyl acetate in terms of carcinogenicity. During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 for more information. No other components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.

Reproductive toxicity : None known.

Specific Target Organ Toxicity, Single Exposure : Overexposure may cause Central Nervous System effects.

Specific Target Organ Toxicity, Repeated Exposure : None known.

Aspiration hazard : None known.

Additional information : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

- Environmental effects** : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Ecotoxicity** : No data available.
- Biodegradability** : No data available.
- Bioaccumulative potential** : No data available.
- Mobility in soil** : No data available.
- PBT and vPvB assessment** : No data available.
- Other adverse effects** : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

- Handling for disposal** : Handle waste according to recommendations in Section 7.
- Methods of disposal** : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations.

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Contact your local, state, provincial or federal environmental agency for specific rules.

Packaging
RCRA

- : Handle contaminated packaging in the same manner as the product.
- : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 1 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packaging Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
9 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
9 CFR/DOT Additional Information	None				

SECTION 1 – REGULATORY INFORMATION

Canadian Information

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on either the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL).

US Federal Information

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.


CERCLA Reportable Quantity (RQ) (40 CFR 117.302): Vinyl acetate: 5000 lbs.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: This product contains an Extremely Hazardous Substance under SARA Section 302. This product contains: vinyl acetate.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds or the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product may be subject to SARA notification requirements, since it contains Toxic Chemical constituents above their *de minimus* concentrations. This product contains: vinyl acetate.

U.S. State Right To Know Laws

California Proposition 65:  **WARNING:** This product can expose you to carbon black, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

Other State Right to Know Laws: Carbon black [CAS# 1333-86-4] (CA, MA, MN, NJ, PA, RI); Stoddard solvent [CAS# 8052-41-3] (CA, MA, MN, NJ, PA, RI), Vinyl acetate [CAS# 108-05-4] (CA, MA, MN, NJ, NY, PA, RI).

SECTION 1 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
*Health: *2 Flammability 1 Physical Hazard: 0 PPE: Gloves, safety glasses*

☐☐☐☐☐

☐ ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
GHS: Globally Harmonized System
HPR: Hazardous Products Regulations
IARC: International Agency for Research on Cancer
Inh: Inhalation
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. Armstrong World Industries, Inc. will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By
Armstrong Flooring, Inc.
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Lancaster, PA, USA 17603

(800) 233-3823
Visit our Website: <http://www.floorexpert.com>

Revision date 30-Sept-2018

End of Document

MATERIAL INFORMATION SHEET

I. PRODUCT IDENTIFICATION

Name: Armstrong Static Dissipative Vinyl Tile
Description: Vinyl Flooring

II. DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping name: Not Classified. Hazard Class: N/A. ID #: N/A
EMERGENCY ONLY CONTACT: CHEM-TEL -1-800-255-3924 or
+01-813-248-0585 (call collect)

III. HMIS (0=minimal hazard; 4 = severe hazard)

Health = 0 Flammability = 1 Reactivity = 0

IV. PRODUCT CONTENT

This product does not contain chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372. All components are on TSCA inventory. This product does NOT contain asbestos.

V. HAZARDOUS INGREDIENTS

<u>(Chemical Identity; Common Name)</u>	<u>C.A.S. No.</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
None	N/A	N/A	N/A	N/A

DESCRIPTION AND INGREDIENT INFORMATION

These vinyl flooring products are produced for residential and commercial (architectural) marketplace use. They come in a wide variety of aesthetic designs, styles, colors, surface finishes, and sizes.

MISCELLANEOUS INFORMATION

Each of these products is classified as an "article" according to Title 29 of the Code of Federal Regulations, OSHA Part 1910.1200(c). They are formed to a specific shape or design during manufacture, have end use functions dependent upon their shape or design, and do not release any hazardous chemical under normal conditions of use.

VI. PHYSICAL DATA

APPEARANCE: Material dependent. BOILING POINT (degrees F): N/A. VAPOR PRESSURE (mm Hg @ 20 degrees C): N/A. VAPOR DENSITY (Air = 1): N/A. PERCENT VOLATILE BY WEIGHT (30 min. @ 275 degrees F): N/A. EVAPORATION RATE (Butyl Acetate = 1): N/A. SOLUBILITY IN WATER: N/A. SPECIFIC GRAVITY (H₂O = 1): N/A. pH: N/A.

VII. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: N/A. FLAMMABLE RANGE: LEL = N/A; UEL = N/A. EXTINGUISHING MEDIA: Water. SPECIAL FIRE FIGHTING PROCEDURES: Protect fire fighters from toxic products of combustion by wearing self-contained breathing apparatus. UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

VIII. HEALTH HAZARD DATA

PRIMARY ROUTE(S) OF ENTRY: N/A. TARGET ORGANS: N/A. EFFECTS OF OVEREXPOSURE: N/A SKIN AND EYES: N/A. INHALATION: N/A. CARCINOGENICITY: NTP: No; IARC Monographs: No; OSHA Regulated: No. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: N/K. FIRST AID PROCEDURES: N/A SKIN AND EYES: N/A. INHALATION: N/A. INGESTION: N/A.

IX. REACTIVITY DATA

STABILITY: N/A. INCOMPATIBILITY: N/A. HAZARDOUS DECOMPOSITION PRODUCTS: N/A. HAZARDOUS POLYMERIZATION: N/A.

X. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: N/A. WASTE DISPOSAL METHOD: Dispose of in accordance with Federal, State, and Local Waste Disposal Regulations.


FLOORING

Static Dissipative Vinyl Tile

Prepared 09/16

Armstrong Flooring, Inc.
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Lancaster, PA 17604
www.floorexpert.com
Technical Services:
1-800-233-3823

XI. SPECIAL HANDLING AND USE INFORMATION

VENTILATION: N/A. RESPIRATORY PROTECTION: N/A.
SKIN AND EYE PROTECTION: N/A.

XII. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: N/A. OTHER PRECAUTIONS: N/A.

XIII. WARNING

FOR PREVIOUSLY INSTALLED FLOOR COVERING

DO NOT SAND, DRY SCRAPE, BEADBLAST, OR MECHANICALLY PULVERIZE EXISTING RESILIENT FLOORING, BACKING OR LINING FELT. THESE PRODUCTS MAY CONTAIN EITHER ASBESTOS FIBERS OR CRYSTALLINE SILICA. POSSIBLE CANCER AND RESPIRATORY TRACT HAZARD BY INHALATION. AVOID CREATING DUST. SMOKING BY INDIVIDUALS WHO HAVE BEEN EXPOSED TO ASBESTOS FIBERS GREATLY INCREASES THE RISK OF SERIOUS BODILY HARM. RFCI'S (Resilient Floor Covering Institute) RECOMMENDED WORK PRACTICES FOR REMOVAL OF RESILIENT FLOOR COVERINGS ARE A DEFINED SET OF INSTRUCTIONS ADDRESSED TO THE TASK OF REMOVING ALL RESILIENT FLOOR COVERING STRUCTURES.

XIV. NOTICE

Various government agencies have regulations governing the removal of in-place asbestos-containing materials. If you contemplate the removal of a resilient floor covering structure that contains (or is assumed to contain) asbestos, you should determine whether such regulations apply.

The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

N/A – not applicable or not available

N/K – none known or not known



SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CADOX L-50A

Product Use Description : Curing agent

Company : Akzo Nobel Functional Chemicals B.V.
Velperweg 76
Arnhem 6824 BM
Netherlands

Telephone : +31263664433

Fax : +31263665830

E-mail address : RegulatoryAffairs@akzonobel.com

Emergency telephone : 24 hours:+31 57 06 79211, CHEMTREC-USA:1-800-424-9300,
CANUTEC-CANADA:1-613-996-6666, 化学事故应急咨询电话:
国家化学事故应急响应中心+86532 8388 9090

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	liquid
Color	clear, colorless
Odor	faint

GHS Classification

Organic peroxides, Type D
Skin corrosion, Category 1B
Serious eye damage, Category 1
Acute aquatic toxicity, Category 3
Chronic aquatic toxicity, Category 3

GHS Label element

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H242 Heating may cause a fire.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary Statements**: Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P220 Keep away from dirt, rust, chemicals in particular.

P234 Keep only in original container.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P410 Protect from sunlight.

P420 Store away from other materials.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

Potential Health Effects**Inhalation**

: Inhalation of aerosols may cause irritation to mucous membranes.
Thermal decomposition can lead to release of irritating gases and vapors.

Skin

: Symptoms may be delayed.
Causes severe skin burns.

Eyes

: Causes serious eye damage.

Ingestion

: Causes burns.
May be harmful if swallowed.

Aggravated Medical Condition

: None known.

Symptoms of Overexposure

: The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Carcinogenicity:**IARC**

: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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-
- OSHA** : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
- NTP** : No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- ACGIH** : Confirmed animal carcinogen with unknown relevance to humans
- Hydrogen peroxide solution 7722-84-1

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3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous ingredients**

Chemical Name	CAS-No.	Classification	Concentration [%]
Methyl ethyl ketone peroxide	1338-23-4	Org. Perox. A; H240 Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Acute 3; H402	30 - 50
Hydrogen peroxide solution	7722-84-1	Ox. Liq. 1; H271 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Acute 2; H401 Aquatic Chronic 3; H412	1 - 5
Methyl ethyl ketone	78-93-3	Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336	1 - 5

30-35% Methyl ethyl ketone peroxide solution in aliphatic ester

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice	: Immediate medical attention is required. Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.
Inhalation	: If breathed in, move person into fresh air. Consult a physician after significant exposure.
Skin contact	: Take off contaminated clothing and shoes immediately. Rinse immediately with plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
Eye contact	: Rinse with plenty of water. Get medical attention immediately. Continue to rinse during transport of patient. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.

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Small amounts splashed into eyes can cause irreversible tissue damage and blindness.

Ingestion : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Take victim immediately to hospital. Do not induce vomiting! May cause chemical burns in mouth and throat.

Notes to physician

Symptoms : The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.

Treatment : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards during fire fighting / Specific hazards arising from the chemical : CAUTION: reignition may occur. Supports combustion. Water spray may be ineffective unless used by experienced firefighters. Heating may cause decomposition with release of toxic fumes. Do not allow run-off from fire fighting to enter drains or water courses.

Combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up / Methods for containment : Keep wetted with water. Soak up with inert absorbent material and dispose of as

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hazardous waste.
 Confinement must be avoided.
 Never return spills in original containers for re-use.

Additional advice : For personal protection see section 8.

7. HANDLING AND STORAGE**Handling**

Advice on safe handling : For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Open drum carefully as content may be under pressure.
 Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Use explosion protected equipment.
 Keep away from sources of ignition - No smoking.
 No sparking tools should be used.
 Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps).
 Do not cut or weld on or near this container even when empty.
 Keep away from combustible material.

Temperature class : It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded.

Storage

Requirements for storage areas and containers : No smoking.
 Electrical installations / working materials must comply with the technological safety standards.
 Keep only in original container.
 Store away from other materials.

Maximum storage temperature: : 30 °C (86 °F)

Other data : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines****Ingredients with workplace control parameters**

Ingredients	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Methyl ethyl ketone peroxide	1338-23-4	C	0.2 ppm	2013-03-01	ACGIH	
	Further information	:	Eye irritation Liver damage Kidney damage Skin irritation			
		C	0.2 ppm 1.5 mg/m ³	2013-10-08	NIOSH REL	
		C	0.7 ppm 5 mg/m ³	1989-01-19	OSHA P0	
Hydrogen peroxide	7722-84-1	TWA	1 ppm	2013-03-01	ACGIH	

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	Further information	:	Upper Respiratory Tract irritation Eye irritation Skin irritation A3: Confirmed animal carcinogen with unknown relevance to humans			
		TWA	1 ppm 1.4 mg/m ³	2013-10-08	NIOSH REL	
		TWA	1 ppm 1.4 mg/m ³	1997-08-04	OSHA Z-1	
	Further information	:	(b): The value in mg/m ³ is approximate.			
		TWA	1 ppm 1.4 mg/m ³	1989-01-19	OSHA P0	
Methyl ethyl ketone	78-93-3	TWA	200 ppm	2013-03-01	ACGIH	
	Further information	:	Central Nervous System impairment Upper Respiratory Tract irritation Peripheral Nervous System impairment BEI: Substances for which there is a Biological Exposure Index or Indices (see BEI® section)			
		STEL	300 ppm	2013-03-01	ACGIH	
	Further information	:	Central Nervous System impairment Upper Respiratory Tract irritation Peripheral Nervous System impairment BEI: Substances for which there is a Biological Exposure Index or Indices (see BEI® section)			
		TWA	200 ppm 590 mg/m ³	2013-10-08	NIOSH REL	
		ST	300 ppm 885 mg/m ³	2013-10-08	NIOSH REL	
		TWA	200 ppm 590 mg/m ³	1997-08-04	OSHA Z-1	
	Further information	:	(b): The value in mg/m ³ is approximate.			
		TWA	200 ppm 590 mg/m ³	1989-01-19	OSHA P0	
		STEL	300 ppm 885 mg/m ³	1989-01-19	OSHA P0	

STEL: Short term exposure limit

TWA: Time Weighted Average

Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
Formic acid	64-18-6, 64-18-6	TWA	5 ppm	2013-03-01	ACGIH	
	Further information	:	Upper Respiratory Tract irritation Eye irritation Skin irritation			
		STEL	10 ppm	2013-03-01	ACGIH	
	Further information	:	Upper Respiratory Tract irritation Eye irritation Skin irritation			
		TWA	5 ppm 9 mg/m ³	2013-10-08	NIOSH REL	
		TWA	5 ppm 9 mg/m ³	2011-07-01	OSHA Z-1	
	Further information	:	(b): The value in mg/m ³ is approximate.			
		TWA	5 ppm 9 mg/m ³	1989-01-19	OSHA P0	
Acetic acid	64-19-7, 64-19-7	TWA	10 ppm	2013-03-01	ACGIH	
	Further information	:	Pulmonary function Upper Respiratory Tract irritation Eye irritation			

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		STEL	15 ppm	2013-03-01	ACGIH	
	Further information	:	Pulmonary function Upper Respiratory Tract irritation Eye irritation			
		TWA	10 ppm 25 mg/m ³	2013-10-08	NIOSH REL	
	Further information	:	Can be found in concentrations of 5-8% in vinegar			
		ST	15 ppm 37 mg/m ³	2013-10-08	NIOSH REL	
	Further information	:	Can be found in concentrations of 5-8% in vinegar			
		TWA	10 ppm 25 mg/m ³	1997-08-04	OSHA Z-1	
	Further information	:	(b): The value in mg/m ³ is approximate.			
		TWA	10 ppm 25 mg/m ³	1989-01-19	OSHA P0	
Propionic acid	79-09-4, 79-09-4	TWA	10 ppm	2013-03-01	ACGIH	
	Further information	:	Upper Respiratory Tract irritation Eye irritation Skin irritation			
		TWA	10 ppm 30 mg/m ³	2013-10-08	NIOSH REL	
		ST	15 ppm 45 mg/m ³	2013-10-08	NIOSH REL	
		TWA	10 ppm 30 mg/m ³	1989-01-19	OSHA P0	
Methyl ethyl ketone	78-93-3, 78-93-3	TWA	200 ppm	2013-03-01	ACGIH	
	Further information	:	Central Nervous System impairment Upper Respiratory Tract irritation Peripheral Nervous System impairment BEI: Substances for which there is a Biological Exposure Index or Indices (see BEI® section)			
		STEL	300 ppm	2013-03-01	ACGIH	
	Further information	:	Central Nervous System impairment Upper Respiratory Tract irritation Peripheral Nervous System impairment BEI: Substances for which there is a Biological Exposure Index or Indices (see BEI® section)			
		TWA	200 ppm 590 mg/m ³	2013-10-08	NIOSH REL	
		ST	300 ppm 885 mg/m ³	2013-10-08	NIOSH REL	
		TWA	200 ppm 590 mg/m ³	1997-08-04	OSHA Z-1	
	Further information	:	(b): The value in mg/m ³ is approximate.			
		TWA	200 ppm 590 mg/m ³	1989-01-19	OSHA P0	
		STEL	300 ppm 885 mg/m ³	1989-01-19	OSHA P0	

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Update
CADOX L-50A		methyl ethyl ketone: 2 mg/l (Urine)	End of shift	2014-03-01

Remarks:

- a No time limit
b Immediately after exposition or after working hours
c In case of long-term exposition: after more than one shift
d Before the next shift

Engineering measures

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Explosion proof ventilation recommended.
 Effective exhaust ventilation system
 Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection : Tightly fitting safety goggles
 Wear face-shield and protective suit for abnormal processing problems.

Hand protection : Glove material: butyl-rubber
 : Glove material: Neoprene

Skin and body protection : Protective suit

Respiratory protection : In the case of vapor or aerosol formation use a respirator with an approved filter.
 Filter A

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.
 Wash hands before breaks and at the end of workday.

Environmental exposure controls

General advice : Prevent product from entering drains.
 If the product contaminates rivers and lakes or drains inform respective authorities.

9. PHYSICAL AND CHEMICAL PROPERTIES**Appearance**

Form : liquid

Color : clear
 colorless

Odor : faint

Odor Threshold : No data available

Safety data

pH : Weakly acidic

Melting point : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

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Vapor pressure	: not determined
Relative vapor density	: No data available
Relative density	: 1.0 at 20 °C
Bulk density	: Not applicable
Water solubility	: partly miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Autoignition temperature	: The substance or mixture is not classified as pyrophoric.
Decomposition temperature	: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.
Self-Accelerating decomposition temperature (SADT)	: 60 °C
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Active Oxygen Content	: 8.8 - 9.0 %
Organic peroxides	: 30 - 35 %

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid	: Confinement must be avoided. Heat, flames and sparks. For safety, store below: 30 °C (86 °F)
Materials to avoid	: Contact with incompatible materials will result in hazardous decomposition. For queries regarding the suitability of other materials please contact the supplier. Do not mix with peroxide accelerators, unless under controlled

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	processing. Use only stainless steel 316, PP, polyethylene or glass-lined equipment. Acids and bases Iron Copper Reducing agents Heavy metals Rust
Hazardous decomposition products	: Carbon oxides Formic acid Acetic acid Propionic acid Methyl ethyl ketone
Thermal decomposition	: SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the SADT. Contact with incompatible substances can cause decomposition below the SADT.
Reactivity	: Stable under normal conditions.
Chemical stability	: Stable under recommended storage conditions.
Hazardous reactions	: No dangerous reaction known under conditions of normal use.
Self-Accelerating decomposition temperature (SADT)	: 60 °C (140 °F)

11. TOXICOLOGICAL INFORMATION**PRODUCT INFORMATION:****Toxicology Assessment**

Further information : No further data available.

Test resultAcute oral toxicity : Acute toxicity estimate: 2,817 mg/kg
Method: Calculation methodAcute inhalation toxicity : Acute toxicity estimate : > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method**Carcinogenicity:**

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IARC	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	: Confirmed animal carcinogen with unknown relevance to humans Hydrogen peroxide solution 7722-84-1

TOXICOLOGY DATA FOR THE INGREDIENTS:**Test result****Component: Methyl ethyl ketone peroxide**

Acute oral toxicity	: LD50: 1,017 mg/kg Species: Rat
Acute inhalation toxicity	: LC50 (Rat): 17 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Skin irritation	: Result: Causes burns.
Eye irritation	: Result: Risk of serious damage to eyes.
Germ cell mutagenicity Genotoxicity in vitro	: Ames test Result: negative
Reproductive toxicity/Fertility	: Species: Rat, male and female Application Route: Oral Dose: 0, 25, 50, 75 milligram per kilogram General Toxicity Parent: NOAEL (No observed adverse effect level): 50 mg/kg body weight/day General Toxicity F1: No observed adverse effect level F1: 50 mg/kg body weight/day Fertility: No observed adverse effect level Parent: 75 mg/kg body weight/day Method: OECD Test Guideline 421 GLP: yes
Target Organ Systemic Toxicant - Repeated exposure	: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	: No aspiration toxicity classification

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Component: Hydrogen peroxide solution

Acute oral toxicity : LD50: 602 mg/kg
Species: Rat
Method: OECD Test Guideline 401
Literature data.

Acute inhalation toxicity : LC50 : 20 mg/l
Exposure time: 4 h
Method: Expert judgment

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Skin irritation : Result: Causes severe burns.

Germ cell mutagenicity
Genotoxicity in vivo : Species: Mouse
Method: Mutagenicity (micronucleus test)
Result: negative
Literature data.

Component: Methyl ethyl ketone

Acute oral toxicity : LD50: 2,737 mg/kg
Species: Rat

Skin irritation : Result: Repeated exposure may cause skin dryness or cracking.
Moderately irritating.

Eye irritation : Result: Irritating to eyes.

Target Organ Systemic
Toxicant - Single exposure : Routes of exposure: Inhalation
The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

Aspiration toxicity : No aspiration toxicity classification

12. ECOLOGICAL INFORMATION**PRODUCT INFORMATION:****Ecotoxicology Assessment**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

Further information on ecology**Hazardous to the ozone layer**

Regulation : 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks : This product neither contains, nor was manufactured with a

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Class I or Class II ODS as defined by the U.S. Clean Air Act
Section 602 (40 CFR 82, Subpt. A, App.A + B).

INGREDIENTS:**Ecotoxicology Assessment****Component: Methyl ethyl ketone peroxide**

Acute aquatic toxicity : Harmful to aquatic life.

Component: Hydrogen peroxide solution

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Test result**Component: Methyl ethyl ketone peroxide****Ecotoxicity effects**

Toxicity to fish : LC50: 44.2 mg/l
Exposure time: 96 h
Species: Poecilia reticulata (guppy)
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : 39 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Test Type: Immobilization

Toxicity to algae : LC50: 5.6 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (algae)
Test Type: Growth inhibition

Toxicity to bacteria : EC10: 12 mg/l
Exposure time: 0.5 h
Species: activated sludge
Test Type: Respiration inhibition
Method: Domestic OECD Guideline 209

Elimination information (persistence and degradability)

Biodegradability : Result: Readily biodegradable.
Method: Closed Bottle test

Component: Hydrogen peroxide solution**Ecotoxicity effects**

Toxicity to fish : LC50: 16.4 mg/l
Exposure time: 96 h
Species: Pimephales promelas (fathead minnow)
Test Type: semi-static test
Literature data.

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Toxicity to daphnia and other aquatic invertebrates : LC50: 2.4 mg/l
 Exposure time: 48 h
 Species: Daphnia pulex (Water flea)
 Test Type: semi-static test
 Literature data.

Toxicity to algae : ErC50: 1.38 mg/l
 Exposure time: 72 h
 Species: Skeletonema costatum
 Test Type: static test
 Literature data.

Elimination information (persistence and degradability)

Bioaccumulation : Bioaccumulation is unlikely.

Mobility : Can be leached out from soil.

Distribution among environmental compartments : Transport to air is not expected.

Further information on ecology

Biochemical Oxygen Demand (BOD) : No data available

Component: Methyl ethyl ketone**Ecotoxicity effects**

Toxicity to fish : LC50: 3,220 mg/l
 Exposure time: 96 h
 Species: Lepomis macrochirus (Bluegill sunfish)

Elimination information (persistence and degradability)

Biodegradability : Result: Readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Product : The product should not be allowed to enter drains, water courses or the soil.
 Do not contaminate ponds, waterways or ditches with chemical or used container.
 Hazardous waste
 Dispose of contents/container in accordance with local regulation.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Do not burn, or use a cutting torch on, the empty drum.
 Due to the high risk of contamination recycling/recovery is not recommended.
 Follow all warnings even after the container is emptied.

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14. TRANSPORT INFORMATION**International Regulation****IATA-DGR**

UN/ID No. : UN 3105
 Proper shipping name : Organic peroxide type D, liquid
 (Methyl ethyl ketone peroxide)
 Class : 5.2
 Subsidiary risk : HEAT
 Packing group : Not Assigned
 Labels : 5.2 (HEAT)
 Packing instruction (cargo aircraft) : 570
 Packing instruction (passenger aircraft) : 570
 Environmentally hazardous : no

IMDG-Code

UN number : UN 3105
 Proper shipping name : ORGANIC PEROXIDE TYPE D, LIQUID
 (Methyl ethyl ketone peroxide)
 Class : 5.2
 Packing group : Not Assigned
 Labels : 5.2
 EmS Code : F-J, S-R
 Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation**49 CFR**

UN/ID/NA number : UN 3105
 Proper shipping name : Organic peroxide type D, liquid
 (Methyl ethyl ketone peroxide, <=45%)
 Class : 5.2
 Packing group : II
 Labels : 5.2
 ERG Code : 145
 Marine pollutant : no
 Reportable Quantity : This product contains the following substance(s) which are
 environmentally hazardous per 49 CFR 172.101, Appendix A:
 (Methyl ethyl ketone peroxide)

15. REGULATORY INFORMATION**Notification status**

CH INV : YES. On the inventory, or in compliance with the inventory
 TSCA : YES. All chemical substances in this product are either listed on the
 TSCA Inventory or in compliance with a TSCA Inventory exemption.
 DSL : YES. All components of this product are on the Canadian DSL.
 AICS : YES. On the inventory, or in compliance with the inventory
 NZIoC : NO. On the inventory, or in compliance with the inventory
 ENCS : YES. On the inventory, or in compliance with the inventory
 ISHL : YES. On the inventory, or in compliance with the inventory
 KECI : YES. On the inventory, or in compliance with the inventory
 PICCS : YES. On the inventory, or in compliance with the inventory
 IECSC : YES. On the inventory, or in compliance with the inventory

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For explanation of abbreviations, see section 16.

TSCA list : Not relevant
OSHA Hazards : Organic Peroxide, Harmful by ingestion., Corrosive to skin,
 Corrosive to eyes, Corrosive to respiratory system.

EPCRA - Emergency Planning and Community Right-to-Know**CERCLA Reportable Quantity**

Ingredients	CAS-No.	Component RQ (lbs)
Methyl ethyl ketone peroxide	1338-23-4	10 lbs

SARA 304 Extremely Hazardous Substances Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)
Hydrogen peroxide solution	7722-84-1	1000 lbs

SARA 311/312 Hazards : Reactivity Hazard
 Acute Health Hazard

SARA 302 : The following components are subject to reporting levels established by SARA Title III, Section 302:
 Hydrogen peroxide solution 7722-84-1

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals subject to disclosure and listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

Methyl ethyl ketone 78-93-3

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations**Massachusetts Right To Know**

Methyl ethyl ketone peroxide	1338-23-4	30 - 50 %
Hydrogen peroxide solution	7722-84-1	1 - 5 %
Methyl ethyl ketone	78-93-3	1 - 5 %

Pennsylvania Right To Know

2,2,4-Trimethyl-1,3-pentanediol diisobutanoate	6846-50-0	50 - 70 %
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Methyl ethyl ketone peroxide	1338-23-4	30 - 50 %
Hydrogen peroxide solution	7722-84-1	1 - 5 %
Methyl ethyl ketone	78-93-3	1 - 5 %

New Jersey Right To Know

2,2,4-Trimethyl-1,3-pentanediol diisobutanoate	6846-50-0	50 - 70 %
Methyl ethyl ketone peroxide	1338-23-4	30 - 50 %
Water	7732-18-5	1 - 5 %
Hydrogen peroxide solution	7722-84-1	1 - 5 %
Methyl ethyl ketone	78-93-3	1 - 5 %

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

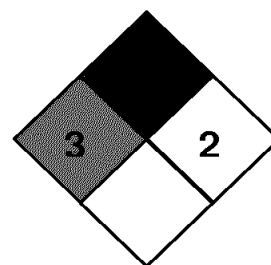
16. OTHER INFORMATION**Full text of H-Statements**

H225	: Highly flammable liquid and vapor.
H240	: Heating may cause an explosion.
H271	: May cause fire or explosion; strong oxidizer.
H302	: Harmful if swallowed.
H314	: Causes severe skin burns and eye damage.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H401	: Toxic to aquatic life.
H402	: Harmful to aquatic life.
H412	: Harmful to aquatic life with long lasting effects.

Further information

HMIS Classification : Health Hazard: 3
Flammability: 2
Reactivity: 2

NFPA Classification : Health Hazard: 3
Fire Hazard: 2
Reactivity Hazard: 2

**Notification status explanation**

REACH	1907/2006 (EU)
CH INV	Switzerland. New notified substances and declared preparations
TSCA	United States TSCA Inventory
DSL	Canadian Domestic Substances List (DSL)
AICS	Australia Inventory of Chemical Substances (AICS)
NZIoC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory

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ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)

Further information

Revision Date 04/26/2015




The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the context of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old, call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



Material Safety Data Sheet

MSDS #: 15630V1

WHMIS (Canada)  B-2 D-2A D-2B	NFPA (USA) Fire  Health Reactivity Specific hazard	HMS (USA) <table border="1"> <tr><td>Health hazards</td><td>2</td></tr> <tr><td>Flammability</td><td>3</td></tr> <tr><td>Physical hazards</td><td>1</td></tr> <tr><td>Personal protection</td><td>(X)</td></tr> </table>	Health hazards	2	Flammability	3	Physical hazards	1	Personal protection	(X)	Protective clothing 
Health hazards	2										
Flammability	3										
Physical hazards	1										
Personal protection	(X)										

Section 1. Chemical product and company identification	
Trade name	A553-PCA-10
Product type	Polyester Resin Solution
Chemical family	Aromatic.
Material uses	Used in the manufacture of thermoset plastic parts.
Manufacturer AOC, LLC 950 Highway 57 East Collierville, TN U.S.A. 38017 Website: www.aoc-resins.com Phone Number: (901) 854-2800 8am-5pm (Central Time) Mon-Fri	In case of emergency CHEMTREC (US): 24 hours/7 days (800) 424-9300 CANUTEC (Canada): 24 hours/7 days (813) 998-6666

Section 2. Hazards identification	
OSHA status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Routes of entry	Eye contact, Skin contact, Inhalation, Ingestion
Potential acute health effects	Eyes: Severe eye irritant which may result in redness, burning, tearing and blurred vision. Skin: Skin irritant which may result in burning sensation. Repeated or prolonged skin contact may cause dermatitis. Ingestion: Ingestion may result in mouth, throat and gastrointestinal irritation, nausea, vomiting and diarrhea. Inhalation: Inhalation of spray mist or liquid vapors may cause upper respiratory irritation and possible central nervous system effects including headaches, nausea, vomiting, dizziness, drowsiness, loss of coordination, impaired judgement and general weakness.
Potential chronic health effects	CARCINOGENIC EFFECTS: Styrene: Classified A4 (not classifiable for human or animal) by ACGIH. Classified 2B (possible for human) by IARC. An increased incidence of lung tumors was observed in mice from a recent inhalation study. The relevance of this finding is uncertain since data from other long-term animal studies and from epidemiology studies of workers exposed to styrene do not provide a basis to conclude that styrene is carcinogenic to humans. Lung effects have been observed in mouse studies following repeated exposure. MUTAGENIC or TERATOGENIC EFFECTS: No known effect according to our database.

Section 3. Composition/information on ingredients		
Name	CAS #	% by weight
1) Styrene	100-42-5	34.5

Effective Date: 06/20/2011

Supersedes Date: Not applicable.

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MSDS no. : 15630V1		A553-PCA-10
Section 4. First aid measures		
Eye contact	Flush with a continuous flow of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Use of buffered baby shampoo will aid in removal. Seek medical attention.	
Skin contact	Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation persists, seek medical attention.	
Inhalation	Move the victim to a safe area as soon as possible. Allow the victim to rest in a well-ventilated area. If breathing is difficult, give oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.	
Ingestion	Do not induce vomiting. Seek immediate medical attention.	

Section 5. Fire fighting measures	
The product is:	Flammable liquid, Class IC.
Auto-ignition temperature	914°F(490°C) Styrene
Flash point	87.6°F (31°C) Styrene
Flammable limits	Lower: 0.9% Upper: 6.8% (Styrene)
Products of combustion	May produce carbon monoxide, carbon dioxide, and irritating or toxic vapors, gases or particulate.
Fire hazard	Flammable in the presence of open flames, sparks, or heat.
Explosion hazard	Can react with oxidizing materials. Explosive in the form of vapor when exposed to heat or flame. Material may polymerize when container is exposed to heat (fire) and polymerization will increase pressure in a closed container which may cause the container to rupture violently.
Fire-fighting media and instructions	SMALL FIRE: Use carbon dioxide, foam, dry chemical or water fog to extinguish. LARGE FIRE: Evacuate surrounding areas. Use carbon dioxide, foam, dry chemical or water fog to extinguish. Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Cool containing vessels with water spray in order to prevent pressure build-up, autoignition or explosion. Prevent run off to sewers or other water ways.

Section 6. Accidental release measures	
Small spill	Absorb with an inert material and place in an appropriate waste disposal container.
Large spill	Stop leak if without risk. Eliminate all ignition sources. Contain with an inert material, recover as much as possible and place the remainder in an appropriate waste disposal container. Warn unauthorized personnel to move away. Prevent entry into sewers or confined areas.

Section 7. Handling and storage	
Handling	WARNING! Use only in well-ventilated areas. Store away from direct sunlight. Avoid inhalation and contact with eyes, skin, and clothing. Wear appropriate personal protective equipment for your task. Ground and bond all containers when transferring the material. Empty containers may retain product and product vapor. Do not expose to heat, flame, sparks or other ignition sources such as cutting, welding, drilling, grinding or static electricity. Do not pressurize. Provide adequate safety showers and eyewashes in the area of use. Note: If product contains metal compounds (Section III), avoid dust from dried product or grinding of articles made from this material.
Storage	Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Containers should be grounded.

Effective Date: 06/20/2011

Supersedes Date: Not applicable.

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MSDS no. : 15630V1		A553-PCA-10
Section 8. Exposure controls/personal protection		
Exposure limits	Styrene	<p>ACGIH TLV (United States, 1/2009). Skin TWA: 20 ppm 8 hour(s). TWA: 85 mg/m³ 8 hour(s). STEL: 40 ppm 15 minute(s). STEL: 170 mg/m³ 15 minute(s). OSHA PEL Z2 (United States, 11/2006). TWA: 100 ppm 8 hour(s). CELL: 200 ppm AMP: 600 ppm 5 minute(s). NIOSH REL (United States, 6/2009). TWA: 50 ppm 10 hour(s). TWA: 215 mg/m³ 10 hour(s). STEL: 100 ppm 15 minute(s). STEL: 425 mg/m³ 15 minute(s).</p> <p>While the federal workplace exposure limit for styrene is 100 ppm, OSHA accepted the styrene industry's proposal to voluntarily meet a PEL of 50 ppm on an 8 hours TWA.</p>
Engineering controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Provide adequate safety showers and eyewashes in the area of use.	
Personal protection	<p>Personal protective equipment may vary depending on the job being performed.</p> <p>Eye/face: Wear eye protection such as safety glasses with side shields, splash goggles or face shield with safety glasses.</p> <p>Skin: Avoid skin contact. Impervious gloves should be worn. Other items may include long sleeves, lab coats, or impervious jackets.</p> <p>Respiratory: Determine if airborne concentrations are below the recommended exposure limits in accordance your company's PPE program and regulatory requirements. If they are not, select a NIOSH-approved respirator that provides adequate protection from the concentration levels encountered. Air-purifying respirators are generally adequate for organic vapors. Use positive pressure, supplied-air respirators if there is potential for an uncontrolled release, if exposure levels are unknown, or under circumstances where air-purifying respirators may not provide adequate protection. Reference OSHA 29 CFR 1910.134.</p>	
Personal protection in case of a large spill	Chemical resistant gloves, full protective suit, and boots. Respiratory protection in accordance with OSHA regulation 29 CFR 1910.134. A self-contained breathing apparatus should be used to avoid inhalation of the product vapors.	

Section 9. Physical and chemical properties

Physical state	Liquid.
Color	Pink.
Odor	Aromatic.
Molecular weight (g/mol)	1000 to 15000
Boiling point	293°F(145°C) Styrene
Melting point	Not available.
pH (1% soln/water)	Not applicable.
Vapor pressure	4.5 mm Hg@ 68°F (20°C) Styrene
Vapor density	3.59 Styrene (Air = 1)
Specific gravity	1.1 (Water = 1)
Water/oil dist. coeff.	Not available.
Evaporation rate	Not available.
Odor threshold	0.14 ppm Styrene
Solubility in water	Slight.

Effective Date: 06/20/2011

Supersedes Date: Not applicable.

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MSDS no. : 15630V1	A553-PCA-10
Section 9. Physical and chemical properties	
Dispersibility properties	Not dispersed in water.

Section 10. Stability and reactivity	
Stability	This product is normally stable, but can become unstable at elevated temperatures.
Instability temperature	>170°F (77°C)
Conditions of instability	Heat.
Incompatibility with various substances	Polymerizes in the presence of organic peroxides, oxidizing materials, or heat.
Corrosivity	Our database contains no additional remark on the corrosivity of this product

Section 11. Toxicological information					
Toxicity to animals	Name	Result	Species	Dose	Exposure
	Styrene	LD50 Oral	Rat	2650 mg/kg	-
		LC50 Inhalation Vapor	Rat	5634.2 ppm	4 hours
Special remarks on toxicity to animals	Lung effects have been observed in mouse studies following repeated exposure.				
Special remarks on chronic effects on humans	No additional remark.				
Special remarks on other toxic effects on humans	No additional remark.				

Section 12. Ecological information	
Ecotoxicity	Toxic to aquatic organisms. Should not be released to sewage system or other bodies of water at concentrations above limits established in regulations or permits.

Section 13. Disposal considerations	
Waste disposal	Recycle to process, if possible. Consult your local or regional authorities. Ignitable characteristic.

Section 14. Transport information		
DOT	UN1866; Resin Solution; 3; III.	Labels 
TDG	UN1866; Resin Solution; 3; III.	
IATA/IMDG	UN1866; Resin Solution; 3; III	
Additional information	US regulations require the reporting of spills when the amount exceeds the Reportable Quantity (RQ) for specific components of this material. See CERCLA in Section 15, Regulatory Information, for the Reportable Quantities.	

Effective Date: 06/20/2011	Supersedes Date: Not applicable.	Page: 4/5
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MSDS no. : 15630V1

A553-PCA-10

Section 15. Regulatory information**Other regulations**

This section does not reference all applicable regulatory compliance lists.

TSCA: All ingredients are listed or compliant with TSCA.

DSL: All ingredients are listed or compliant with the NSNR.

Proposition 65 Warning: This product contains a chemical(s) known to the State of California to cause cancer, birth defects and/or reproductive harm.

SARA 302 component(s): None.

SARA 313 component(s): Styrene.

CERCLA(RQ): Styrene - 1000 lbs. (453.6 kg)

Section 16. Other information**Prepared by**

AOC, LLC - Corporate Regulatory Affairs.

FL

LEGAL DISCLAIMER

The information contained in this data sheet is furnished in good faith and without warranty, representation, or inducement or license of any kind, except that it is accurate to the best of AOC, LLC's knowledge, or was obtained from sources believed by AOC, LLC to be reliable. The accuracy, adequacy or completeness of health and safety precautions set forth herein cannot be guaranteed, and the buyer is solely responsible for ensuring that the product is used, handled, stored, and disposed of safely and in compliance with applicable federal, state or provincial, and local laws. AOC, LLC disclaims liability for any loss, damage or personal injury that arises from, or is in any way related to, use of the information contained in this data sheet.

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30101/ P1

1. IDENTIFICATION

APEX PRO™ - Unlimited Moisture Vapor Barrier Hard-Set Resilient Flooring Adhesive
Recommended use of the chemical and restriction on use: Moisture barrier adhesive for installation of flooring materials over approved subfloor –all types of resilient flooring including: Carpet Tile (Hard and Soft-backed), Cork Flooring, Cork-backed Hard Surface, Cork Underlayment, Linoleum, LVT/ LVP, Rigid Core (SPC/WPC/WSC/ETC.), Rubber (Tile/Sheet), Sheet (Felt-backed), Sheet (Fiberglass), Sheet (Heterogeneous), Sheet (Homogeneous), Stair Treads (Rubber/Vinyl), VCT, VET, Walk-off Carpet Tile.

Company: Bruce® Flooring 3840 Hempland Road, Mountville, PA 17554, (706) 712-5820

Emergency Telephone Number: (800) 535-5053

Other Means of Identification

Chemical Family: Modified Silane blend

2. HAZARDS IDENTIFICATION

According to regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

Classification of the Product

No need for classification according to GHS criteria for this product.

Label Elements

This product does not require a hazard warning label in accordance with GHS criteria.

Hazards Not Otherwise Classified

None known if used according to instructions.

Irritation may occur when in contact with eyes and skin.

Labeling of Special Preparations (GHS): None required

According to Regulation 1994 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

3. COMPOSITION/INFORMATION ON INGREDIENTS

According to Regulation 1994 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

CAS #	Content	Chemical Name
Trade Secret	35-55	Silylated Polyurethane Resin
Trade Secret	1-5	Plasticizer
1317-65-3	30-40	Calcium carbonate
Trade Secret	1 - 5	Additives
25322-69-4	10-20	Propylene glycol

4. FIRST AID MEASURES

General Advice: Upon contact, remove material from skin, eyes and clothing. If irritation persists, seek medical attention.

If Inhaled: Remove individual to fresh air if needed.

If on Skin: Wash with mild soap and water.

If in Eyes: Open eyelids and flush with running water for at least 15 minutes.

If Swallowed: Do not induce vomiting. Seek medical help immediately.

Most Important Symptoms and Effects, Both Acute and Delayed: None expected due to non-classification of the product.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

Note to physician - Symptomatic Treatment

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Use water spray, foam, dry powder when needed.

Special Hazards Arising from the Substance or Mixture

Material is a mixture of organic compounds. Compounds of carbon may arise during burning.

Advice for fire-fighters: Wear self-contained breathing apparatus and turn out gear.

Further Information

Dispose debris and contaminated clothing in accordance with regulations.

6. ACCIDENTAL RELEASE MEASURES

Further Accidental Release Measures: Slip hazard when spilled.

Personal Precautions Protective Equipment and Emergency Procedures: Use personal protective clothing. Avoid contact with skin and eyes.

Environmental Precautions: Do not release spilled material into natural waters.

Methods and Material for Containment and Cleaning Up:

Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations. Spills should be contained, solidified, and placed in suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not puncture. Keep out of the reach of children.

Conditions for Safe Storage, Including any Incompatibilities

Keep from freezing. Avoid extreme temperatures.

30101/ P2

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Advice on System Design

Maintain proper ventilation.

Personal Protective Equipment:

Respiratory Protection: NIOSH respirator if needed. Use local exhaust ventilation. Do not use closed air-circulating system.

Skin Protection: Chemical resistant gloves, apron, coveralls, and boots to prevent unnecessary contact.

Eye Protection: Safety glasses, goggles, or face shield

General Safety and Hygiene Safety Measures:

Wash hands and/or face after use. Launder contaminated clothing before re-use. Always use protective equipment to avoid direct contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Low viscosity liquid

Odor: Mild

Odor Threshold: No data

VOCs: <0.1 g/L

Color: Off white

pH Value: Not applicable

Melting Point: Not applicable

Boiling Point: No data

Flash Point: Not applicable

Flammability: Non flammable

Lower Explosion Limit: Not applicable

Upper Explosion Limit: Not applicable

Vapor Pressure: Low

Density: Not determined

Relative Density: Not determined

Vapor Density: Low

Partition Coefficient n-octanol/water (log Pow): No data

Self-Ignition Temperature: Not Applicable

Solubility in Water: Insoluble

Miscibility in Water: Not miscible

Evaporation Rate: Low

Other Information: Moisture cure product. Product will start curing in the presence of moisture.

10. STABILITY AND REACTIVITY

Reactivity: Stable

Chemical Stability: Stable

Possibility of Hazardous Reactions: None, product is stable

Conditions to avoid: Extreme temperatures

Incompatible Materials: Water. Product is a moisture curing material.

Hazardous Decomposition Products: None known

11. TOXICOLOGICAL INFORMATION

No Data Available

Primary routes of exposure: Respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity/Effects

Acute toxicity: May cause irritation upon contact.

Chronic Toxicity Effects

Repeated Dose Toxicity: No data available

Genetic Toxicity: No data available

Carcinogenicity: Not carcinogenic

Reproductive Toxicity: No data available

Teratogenicity: No data available

Experiences in Humans: No data available

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Abide by all state, federal and local regulations

14. TRANSPORTATION INFORMATION

Proper Shipping Name: Not applicable

Proper Hazard Class: Not hazardous

Hazard Code: None hazardous

Bill of Lading Description: Adhesives, NOI

15. REGULATORY INFORMATION

Federal Regulations:

Registration Status:

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: None

EPA SARA Title III Section 312: None

NFPA Hazard Codes:

Health: 1 Fire: 0

Reactivity: 0 Special:

HMIS rating:

Health: 1 Flammability: 0 Physical Hazard: 0

16. OTHER INFORMATION

SDS prepared for: Bruce Flooring

SDS prepared on: December 10, 2020

Bruce Flooring believes the data set forth herein is accurate as of the date hereof. Bruce Flooring makes no warranty with respect hereto and expressly disclaims all liability of reliance thereon. All data is offered solely for consideration, investigation, and verification.

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Name: ECORE E-Grip III Product Series
Product Code: E-Grip III
Product(s) Covered: See Section 16 for more information

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended Use: Adhesives
Uses Advised Against: No information available

1.3 Details of the Supplier of the Safety Data Sheet

Company Name: ECORE International Inc., 715 Fountain Avenue, Lancaster, PA 17601
 Phone: 1 (800) 322-1923 (Domestic Toll Free)
 Phone: 1 (717) 295-3400 (8:00 a.m. to 5:00 p.m. EST)
 Fax: 1 (717) 295-3414

1.4 Emergency Telephone Number:

Emergency Telephone Telephone: 1-800-227-0332
 Outside U.S. 1-703-527-3887

Section 2. Hazard Identification

2.1 Classification of the Substance or Mixture

Respiratory sensitization	Category 1
Skin sensitization	Category 1
Reproductive Toxicity	Category 1B


2.2 Label Elements

EMERGENCY OVERVIEW

DANGER

Hazard statements

- May cause allergy or asthma symptoms or breathing difficulties if inhaled
- May cause an allergic skin reaction
- May damage fertility or the unborn child



Appearance: Paste
 Physical State: Liquid
 Odor: No information available

Precautionary Statements - Prevention

Obtain special instruction before use

- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Avoid breathing dust/fume/gas/mist/vapors/spray
- In case of inadequate ventilation, wear respiratory protection
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves

Precautionary Statements - Response

- IF exposed or concerned; Get medical advice/attention
- Specific treatment (see first aid measures on this label)

•IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

•IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CEENTER or doctor/physician.

Precautionary Statements - Storage

- Store locked up.

Precautionary Statements - Disposal

- Dispose of contents/container to an approved waste disposal plant.

Hazards Not Otherwise Classified (HNOC)

- Not applicable

Unknown Toxicity

- 18% of the mixture consists of ingredient(s) of unknown toxicity.

2.3 Other Information

No information available.

Section 3. Composition / Information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical Name	CAS No.	Weight - %
Limestone	1317-65-3	40 - 70
Quartz	14808-60-7	0.1 - 1
Dibutyltin dilaurate	77-58-7	0.1 - 1
Benzenesulfonyl isocyanate, 4-methyl-	4083-64-1	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4. First Aid Measures

4.1 Description of First Aid Measures

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. May cause sensitization by skin contact. In the case of skin irritation or allergic reactions, see a physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If symptoms persist, call a physician.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Symptom No information available.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians May cause sensitization by inhalation and skin contact. Treat symptomatically.

4.4 Reference to Other Sections

Reference to Other Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION
 Section 11: TOXICOLOGY INFORMATION

Section 5. Fire-fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.

5.2 Special Hazards Arising from the Substance or Mixture

Specific Hazards Arising from the Chemical: No information available.

Explosion Data

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

5.3 Advice for Firefighters

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA / NIOSH (approved or equivalent) and full protective gear.

Section 6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions: Ensure adequate ventilation, especially in confined areas.

6.2 Environmental Precautions

Environmental: See Section 12 for additional Ecological information.

6.3 Methods and Material for Containment and Cleaning Up

Methods for Containment: Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up: Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

6.4 Reference to Other Sections

Reference to Other Sections: Section 7: HANDLING AND STORAGE

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Section 13: DISPOSAL CONSIDERATIONS

7. Handling and Storage

7.1 Precautions for Safe Handling

Advice on Safe Handling: Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for Safe Storage, including and incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from direct contact with water or excessive moisture. Reacts with water.

Incompatible Materials: Water.

7.3 Specific End Use(s)

Other Information: No information available.

7.4 References to Other Sections

Reference to Other Sections: Section 13: DISPOSAL CONSIDERATIONS

Section 10: STABILITY AND REACTIVITY

SECTION 8. Exposure Controls / Personal Protection

8.1 Control Parameters

Exposure Guidelines As Quartz (CAS# 14808-60-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal conditions of use. As Limestone (CAS# 1317-65-3) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist or spray) under normal conditions of use.

Chemical Name	ACFIH TLV	NIOSH IDLH	OSHA PEL
Limestone (1317-65-3)	-	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust	TWA: 15 mg/m ³ total dust STEL: 20 mg/m ³ respirable
Quartz (14808-60-7)	TWA: 0.025 mg/m ³ respirable fraction	IDLH: 50 mg/m ³ respirable dust TWA: 5 mg/m ³ respirable dust	: (30/(%SiO ₂ + 2) mg/m ³ TWA total dust : (250/(%SiO ₂ + 5) TWA respirable fraction : (10/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction
Dibutyltin dilaurate (77-58-7)	TWA: 0.1 mg/m ³ Sn S* STEL: 20 mg/m ³ Sn	IDHL: 25 mg/m ³ Sn TWA: 0.1 mg/m ³ except Cyhexatin Sn	TWA: 0.1 mg/m ³ Sn

8.2 Exposure Controls

Engineering Controls Showers, Eyewash stations, Ventilation systems.

Personal Protective Equipment (PPE)

- Eye / Face Protection** Wear safety glasses with side shields (or goggles).
- Skin / Body Protection** Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.
- Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH / MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
- General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical State	Liquid
Appearance	Paste
Color	Grey
Odor	No information available
Odor Threshold	No information available
Property	Values
pH	No information available
Melting Point / Freezing	No information available
Boiling Point	No information available
Flash Point	260°C / 500°F
Evaporation Rate	No information available
Flammability (solid, gas)	No information available

Remarks * Method

Flammability Limit in Air

Upper Flammability Limit No information available

Lower Flammability Limit No information available

Vapor Pressure No information available

Vapor Density No information available

Specific Gravity No information available

Water Solubility No information available

Solubility in Other

Partition Coefficient No information available

Autoignition Temperature No information available

Decomposition Temperature No information available

Kinematic Viscosity No information available

Dynamic Viscosity No information available

Explosive Properties No information available

Oxidizing Properties No information available

9.2 Other Information

Softening Point No information available

Molecular Weight No information available

Solvent Content (%) No information available

Solid Content (%) 100

Density 1.650 g/cm³

VOC < 0.1%

10. Stability and Reactivity

10.1 Reactivity

None under normal use conditions.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

None under normal processing.

10.4 Conditions to Avoid

Extremes of temperature and direct sunlight. Keep from any possible contact with water. Reacts with water.

10.5 Incompatible Materials

Water.

10.6 Hazardous Decomposition Products

None known based on information supplied.

11. Toxicological information

11.1 Information on Toxicological Effects

Product Information No Data Available.

Inhalation No Data Available.

Eye Contact No Data Available.

Skin Contact No Data Available.

Ingestion No Data Available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Limestone (1317-65-3)	> 5000 mg/kg (rat)	-	-
Quartz (14808-60-7)	> 2000 mg/kg (rat)	-	-
Dibutyltin dilaurate (77-58-7)	= 2071 mg/kg (rat)	> 2000 mg/kg (rat)	-
Benzenesulfonyl isocyanate, 4-methyl- (4083-64-1)	= 2234 mg/kg (rat)	-	> 640 ppm (rat) 1 h

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Symptoms No information available.

Skin Corrosion / Irritation No information available.

Serious Eye Damage / Eye Irritation No information available.

Irritation No information available.

Corrosivity No information available.

Sensitization No information available.

Germ Cell Mutagenicity No information available.

Reproductive Toxicity No information available.

Developmental Toxicity No information available.

Teratogenicity No information available.

STOT - Single Exposure No information available.

STOT - Repeated Exposure No information available.

Chronic Toxicity No information available.

Target Organ Effects Eyes, Respiratory System, Skin

Aspiration Hazard No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. As Quartz (14808-60-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal conditions of use.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz (14808-60-7)	A2 - Suspected Human Carcinogen	Group 1 - Carcinogenic to Humans	Known - Known Carcinogen	X - Present

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

12. Ecological Information

12.1 Toxicity

12.2 Chemical Name	Algae / Aquatic Plants	Fish	Toxicity to Micro-organisms	Crustacea
Quartz (14808-60-7)	CE50 (72h) > 200 mg/L Algae (Desmodesmus subspicatus)	CL50 (96h) > 10,000mg/L Fish (Oncorhynchus mykiss)		CE50 (48h) > 1000 mg/L (Daphnia Magna)
Dibutyltin dilaurate (77-58-74)		LC50 (48h) = 2 mg/L (Oryzias latipes)		

No information available.

12.3 Bioaccumulative Potential

No information available.

12.4 Mobility in Soil

No information available.

12.5 Other adverse effects

No information available.

13. Disposal Considerations

13.1 Waste Treatment Methods

Disposal of Wastes It is the responsibility of the waste generator to determine the toxicity and physical properties of the material

Contaminated Packaging Dispose of in accordance with federal, state and local regulations.

14. Transport Information

DOT Not regulated.

IATA Not regulated.

IMDG Not regulated.

15. Regulatory information

Global Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA United States Toxic Substances Control Act Section 8(b) Inventory

DSL Canadian Domestic Substances List

Listed The components of this product are either listed or exempt from listing on inventory.

Not Listed One or more components of this product are not listed on inventory.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the

WHMIS Hazard Class D2A - Very toxic materials

United States of America



SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals

SARA 311/312 Hazard Categories

- Acute Health Hazard** Yes
- Chronic Health Hazard** Yes
- Fire Hazard** No
- Sudden release of pressure hazard** No

California Proposition 65

This product contains one or more of the substances listed on Proposition 65 at or above 0.01 wt. %.

Chemical Name	CAS No.
Quartz	14808-60-7
N-(trichloromethylthio) phthalimide	133-07-3
Carbon black	1333-86-4

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16. Other Information

Product(s) Covered

- A74410** - DCVP PL Ecore E-Grip III 24/10.1
- A74411** - DCVP PL Ecore E-Grip III 4G
- A74412** - DCVP PL Ecore E-Grip III 2G

HMIS

- Health Hazards** 2*
- Flammability** 1
- Physical Hazards** 0
- Personal Protection** X

Key or Legend to Abbreviations and Acronyms Used in the Safety Data Sheet

No information available.

Key Literature References and Sources for Data

No information available.

- Prepared by** WWelch
- Revision Date** 18-May-16
- Revision Note** Not applicable
- Training Advice** No information available
- Additional Information** No information available

Disclaimer

E-Grip III is a private label brand manufactured exclusively for Ecore International. All information is provided through our contracted manufacture partners. The information provided in the Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

***** End of Safety Data Sheet *****

30102/ P1

1. IDENTIFICATION

BONDLINK™ - Hard-Set Transitional Pressure Sensitive Resilient Flooring Adhesive

Recommended use of the chemical and restriction on use: Interior installation of flooring material over approved subfloors: Sheet goods (vinyl, homogeneous, heterogeneous, fiberglass, felt-backed), LVT/LVP, Rubber (tile, sheet), WPC/WSC, Cork-backed hard surface, Cork underlayment, VCT/VET, Stair treads (rubber and vinyl).

Company: Bruce® Flooring 3840 Hempland Road, Mountville, PA 17554, (706) 712-5820

Emergency Telephone Number: (800) 535-5053

Other Means of Identification

Chemical Family: Amide-Ester-Acrylate blend

2. HAZARDS IDENTIFICATION

According to regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

Classification of the Product

No need for classification according to GHS criteria for this product.

Label Elements

This product does not require a hazard warning label in accordance with GHS criteria.

Hazards Not Otherwise Classified

None known if used according to instructions.

Irritation may occur when in contact with eyes and skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

According to Regulation 1994 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

CAS #	Content	Chemical Name
Trade Secret	10-20	Tackifier resin
Trade Secret	40-50	Acrylic latex
7732-18-5	10-20	Water

4. FIRST AID MEASURES

General Advice: Upon contact, remove material from skin, eyes and clothing. If irritation persists, seek medical attention.

If Inhaled: Remove individual to fresh air if needed.

If on Skin: Wash with mild soap and water.

If in Eyes: Open eyelids and flush with running water for at least 15 minutes.

If Swallowed: Do not induce vomiting. Seek medical help immediately.

Most Important Symptoms and Effects, Both Acute and Delayed: None expected due to non-classification of the product.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

Note to physician - Symptomatic Treatment

5. FIRE-FIGHTING MEASURES

Extinguishing Media

None needed in wet state. Product is water based. Dry material will burn. Use water spray, foam, dry powder when needed.

Special Hazards Arising from the Substance or Mixture

Material is a mixture of organic compounds. Compounds of carbon may arise during burning.

Advice for fire-fighters: Wear self-contained breathing apparatus and turn out gear.

Further Information

Dispose debris and contaminated clothing in accordance with regulations.

6. ACCIDENTAL RELEASE MEASURES

Further Accidental Release Measures: Slip hazard when spilled.

Personal Precautions Protective Equipment and Emergency Procedures: Use personal protective clothing. Avoid contact with skin and eyes.

Environmental Precautions: Do not release spilled material into natural waters.

Methods and Material for Containment and Cleaning Up:

Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations. Spills should be contained, solidified, and placed in suitable containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not puncture. Keep out of the reach of children.

Conditions for Safe Storage, Including any Incompatibilities

Keep from freezing. Avoid extreme temperatures.

30102/ P2

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Advice on System Design

Maintain proper ventilation.

Personal Protective Equipment:

Respiratory Protection: NIOSH respirator if needed. Use local exhaust ventilation. Do not use closed air-circulating system.

Skin Protection: Chemical resistant gloves, apron, coveralls, and boots to prevent unnecessary contact.

Eye Protection: Safety glasses, goggles, or face shield

General Safety and Hygiene Safety Measures:

Wash hands and/or face after use. Launder contaminated clothing before re-use. Always use protective equipment to avoid direct contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Medium viscosity liquid

Odor: Mild

Odor Threshold: No data

VOCs: <21 g/L

Color: Off white to cream

pH Value: 9.0 - 9.5

Melting Point: Not applicable

Boiling Point: Similar to water

Flash Point: Not applicable

Flammability: Non flammable

Lower Explosion Limit: Low

Upper Explosion Limit: Low

Vapor Pressure: Low

Density: Not determined

Relative Density: Not determined

Vapor Density: Low

Partition Coefficient n-octanol/water (log Pow): No data

Self-Ignition Temperature: Not Applicable

Solubility in Water: Limited

Miscibility in Water: Miscible

Evaporation Rate: Same as water

Other Information:

10. STABILITY AND REACTIVITY

Reactivity: Stable

Chemical Stability: Stable

Possibility of Hazardous Reactions: None, product is stable

Conditions to avoid: Extreme temperatures

Incompatible Materials: None known

Hazardous Decomposition Products: None known

11. TOXICOLOGICAL INFORMATION

No Data Available

Primary routes of exposure: Respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity/Effects

Acute toxicity: May cause irritation upon contact.

Chronic Toxicity Effects

Repeated Dose Toxicity: No data available

Genetic Toxicity: No data available

Carcinogenicity: Not carcinogenic

Reproductive Toxicity: No data available

Teratogenicity: No data available

Experiences in Humans: No data available

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Abide by all state, federal and local regulations

14. TRANSPORTATION INFORMATION

Proper Shipping Name: Not applicable

Proper Hazard Class: Not hazardous

Hazard Code: None hazardous

Bill of Lading Description: Adhesives, NOI

15. REGULATORY INFORMATION

Federal Regulations:

Registration Status:

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: None

EPA SARA Title III Section 312: None

NFPA Hazard Codes:

Health: 1 Fire: 0

Reactivity: 0 Special:

HMIS rating:

Health: 1 Flammability: 0 Physical Hazard: 0

16. OTHER INFORMATION

SDS prepared for: Bruce Flooring

SDS prepared on: December 10, 2020

Bruce Flooring believes the data set forth herein is accurate as of the date hereof. Bruce Flooring makes no warranty with respect hereto and expressly disclaims all liability of reliance thereon. All data is offered solely for consideration, investigation, and verification.

Safety Data Sheet

FORBO EZ-ON 100
Revision Number 1

Revision Date 12-Apr-2019
Supersedes Date 12-Apr-2019

1. Identification

1.1. Product Identifier

Product Name FORBO EZ-ON 100

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Adhesives.
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Responsible Party

Forbo Flooring Systems
Humbolt Industrial Park
8 Maplewood Drive
Hazelton PA 18202 USA
Phone: USA +1 (800) 842-7839
Canada +1 (800) 268-8108

1.4. Emergency telephone number

Telephone: 1-800-842-7839

Section 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

2.2. Label Elements

EMERGENCY OVERVIEW

Danger

Hazard statements

Causes serious eye damage
May cause an allergic skin reaction



Safety Data Sheet

FORBO EZ-ON 100
Revision Number 1

Revision Date 12-Apr-2019
Supersedes Date 12-Apr-2019

Appearance viscous	Physical State Liquid	Odor Characteristic
---------------------------	------------------------------	----------------------------

Precautionary Statements Prevention

Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements Storage

Not applicable

Precautionary Statements Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Information on acute toxicity

77 % of the mixture consists of ingredient(s) of unknown toxicity

2. Other Information

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Section COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Substances

Mixture

2.2 Mixtures

Chemical name	CAS No.	Weight %
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine	1760-24-3	3 - 7
Silane, ethenyltrimethoxy-	2768-02-7	1 - 5
Titanium dioxide	13463-67-7	0.1 - 1

**The exact percentage (concentration) of composition has been withheld as a trade secret.*

Section FIRST AID MEASURES

3.1 Description of first aid measures

General advice

Remove contaminated clothing and shoes. If medical advice is needed, have product container or label at hand.

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Hold eyelids apart and consult a physician.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. May cause sensitization by

Safety Data Sheet

FORBO EZ-ON 100
Revision Number 1

Revision Date 12-Apr-2019
Supersedes Date 12-Apr-2019

skin contact. In the case of skin irritation or allergic reactions see a physician.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Ingestion If swallowed, rinse mouth with water (only if the person is conscious). If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Self protection of the first aider Use personal protective equipment as required.

2. Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye damage. Repeated or prolonged skin contact with the unexposed coating may cause skin irritation and/or dermatitis and sensitization in susceptible persons.

3. Indication of any immediate medical attention and special treatment needed

Note to physicians Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing. May cause sensitization by skin contact. Treat symptomatically.

4. Reference to Other Sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 11: TOXICOLOGY INFORMATION

Section FIRE FIGHTING MEASURES

1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Extinguishing powder. Water spray or fog. Alcohol resistant foam.

Unsuitable extinguishing media

Strong water jet.

2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Carbon monoxide. Carbon dioxide (CO₂). Halogenated hydrocarbons. Nitrogen oxides (NO_x). May cause sensitization by skin contact.

Hazardous Combustion Products

Carbon monoxide. Carbon dioxide (CO₂).

Explosion Data

Sensitivity to mechanical impact

None.

Sensitivity to static discharge

None.

3. Advice for firefighters

Special protective actions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not allow run-off from fire-fighting to enter drains or water courses.

Section ACCIDENTAL RELEASE MEASURES

Safety Data Sheet

FORBO EZ-ON 100
Revision Number 1

Revision Date 12-Apr-2019
Supersedes Date 12-Apr-2019

1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection equipment. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes or clothing. Do not touch or walk through spilled material.

2. Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not allow to enter into soil/subsoil. See Section 12 for additional Ecological Information.

3. Methods and material for containment and cleaning up

Methods for containment Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

4. Reference to other sections

Reference to other sections Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
Section 13: DISPOSAL CONSIDERATIONS

Section HANDLING AND STORAGE

1. Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. After contact with skin, wash immediately with plenty of water and soap. Wash contaminated clothing before reuse.

2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep/store only in original container. Keep away from food, drink and animal feeding stuffs. Protect from sunlight. Store in a well-ventilated place. Keep from freezing. Protect from moisture. Keep at temperatures between 65 and 95 °C.

Incompatible materials Water.

3. Specific end use(s)

Specific Use(s)
Adhesives.

Other information No information available.

4. References to Other Sections

Reference to other sections Section 13: DISPOSAL CONSIDERATIONS
Section 10: STABILITY AND REACTIVITY

Section EXPOSURE CONTROLS/PERSONAL PROTECTION

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1. Control parameters

E exposure Guidelines

This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Chemical name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Me ico
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	IDLH: 5000 mg/m ³ TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale	TWA: 15 mg/m ³ total dust	TWA: 10 mg/m ³ STEL: 20 mg/m ³

Chemical name	Argentina	Brazil	Chile	Venezuela
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	-	-	TWA: 10 mg/m ³

Chemical name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Me ico
Methyl alcohol 67-56-1	STEL: 250 ppm TWA: 200 ppm S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³	TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 310 mg/m ³

Chemical name	Argentina	Brazil	Chile	Venezuela
Methyl alcohol 67-56-1	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 156 ppm TWA: 200 mg/m ³ Skin	TWA: 175 ppm TWA: 229 mg/m ³ Skin	Skin STEL: 250 ppm TWA: 200 ppm

2. E exposure controls

OTHER INFORMATION

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Personal protective equipment PPE

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations

Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State

Liquid

Appearance

viscous

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Color light brown
Odor Characteristic
Odor Threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	No information available		
Melting point / freezing point	No data available		
Boiling point / boiling range	No data available		
Flash Point	156 °C / 313 °F		
Evaporation Rate	No information available		
Flammability (solid, gas)	No information available		
Flammability Limit in Air			
Upper flammability or explosive limits	No information available		
Lower flammability or explosive limits	No information available		
Vapor Pressure	No information available		
Vapor Density	No information available		
Relative Density	No information available		
Water Solubility	No information available		
Solubility in Other Solvents			
Partition coefficient	No information available		
Autoignition Temperature	No information available		
Decomposition Temperature	No information available		
Kinematic Viscosity	No information available		
Dynamic Viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		
<u>9.2. Other information</u>			
Softening Point	No information available		
Molecular Weight	No information available		
Solvent content (%)	No information available		
Solid content (%)	No information available		
Density	1.02 g/cm ³		
VOC (volatile organic compound)		No information available	

Section 10 STABILITY AND REACTIVITY

10.1. Reactivity

Product cures with moisture.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Protect from moisture. Product cures with moisture.

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10. Incompatible materials

Water.

10. Hazardous decomposition products

None known based on information supplied.

Section 11 TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Product Information	No data available
Inhalation	Based on available data, the classification criteria are not met.
Eye contact	Corrosive to eyes. Avoid contact with eyes.
Skin contact	May cause sensitization by skin contact.
Ingestion	Based on available data, the classification criteria are not met.

Component Information

Chemical name	Oral LD 50	Dermal LD 50	Inhalation LC 50
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine 1760-24-3	= 2295 mg/kg (Rat)	>2000 mg/Kg (Rat)	LC50 4H (Aerosol) 1.5 - 2.44 mg/L air
Silane, ethenyltrimethoxy- 2768-02-7	LD 50 = 7120 -7236 mg/kg (Rat) OECD 401	= 3360 µL/kg (Rabbit)	LC50 (4hr) 16.8 mg/l (rat) OECD TG 403
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long term exposure

Symptoms	No information available.
Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	Causes severe eye damage.
Irritation	No information available.
Corrosivity	No information available.
Sensitization	May cause sensitization by skin contact.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
Developmental Toxicity	No information available.
Teratogenicity	No information available.
STOT single exposure	No information available.
STOT repeated exposure	No information available.
Chronic Toxicity	No information available.
Target Organ Effects	Eyes, retina, Skin.
Aspiration hazard	Not applicable.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen. As Titanium dioxide (13463-67-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans

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OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Section 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
N-[3-(Trimethoxysilyl)propyl]-1,2-ethanediamine 1760-24-3		LC50 (96H) =597 mg/L Fish (Danio rerio)Semi-static		EC50 (48h) =81mg/L Daphnia magna Static
Silane, ethenyltrimethoxy- 2768-02-7	EC 50 (72h) > 957 mg/l (Desmodemus subspicatus) EU Method C.3	LC50 (96h) = 191 mg/l (Oncorhynchus mykiss)		EC50(48hr) 168.7mg/l (Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

Other adverse effects

No information available

Section 1 DISPOSAL CONSIDERATIONS

1.1. Waste treatment methods

Disposal of Wastes

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations

Contaminated packaging

Dispose of in accordance with federal, state and local regulations

Section 1 TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG Not regulated

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Section 1 REGULATORY INFORMATION

Global Inventories

TSCA	Listed
DSL	Listed

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Listed - The components of this product are either listed or exempt from listing on inventory.

Not Listed - One or more components of this product are not listed on inventory.

United States of America

SARA 1

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 11/ 12 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/ 64/EU

This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

SVHC Substances of Very High Concern for Authorization

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 1 OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

No information available

Key Literature References and Sources for Data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date 12-Apr-2019

Revision note Not applicable.

Training Advice No information available

Further information No information available

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Product Identifier : **Henry® 430 ClearPro™ Clear VCT Floor Adhesive**
Product Code : 70010432
Trade Name/Synonyms : Henry 430
Recommended Use : Adhesive for installing Vinyl Composition Tile (VCT).
Uses Advised Against : No information available.

Manufacturer's name and address:



The W.W. Henry Company
400 Ardex Park Drive
Aliquippa, PA 15001 USA

Information Telephone No. : (800) 232-4832 or (724) 203-8000
Website Address : <http://www.wwhenry.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)
Not classified as hazardous.

GHS Pictograms

None.

Signal Word

None.

Hazard Statements

None.

Safe Handling Instructions:

Avoid eye and skin contact. It is recommended to use safety glasses and gloves during handling. During installation process, adequate ventilation of the work area should be maintained. Although the adhesive is low VOC, persons who are sensitive to odors or chemicals should avoid the work area during installation. Keep container closed.

During normal usage of the product as recommended, airborne dusts and mists will not be present. See Section 7 (Handling and Storage) for further details.

Hazards Not Otherwise Classified

None.

% With Unknown Acute Toxicity : Less than 1% by weight of this product is comprised of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
No hazardous ingredients	N/Ap	100

SECTION 4 – FIRST AID MEASURES

- General** : Call a doctor if you feel unwell.
- Inhalation** : If a worker develops breathing problems while working with this material, remove the worker to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Wash with plenty of soap and water. If irritations or symptoms develop, seek medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : None known.
- Skin* : Symptoms may include mild redness or itching.
- Eyes* : Symptoms may include mild redness, itching, or pain.
- Ingestion* : None known.

Effects of long-term (chronic) exposure

- : None known.

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any exposure to the eye which causes irritation.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, alcohol foam or water spray.
- Unsuitable extinguishing media** : Water jet may spread the burning material.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, as well as other toxic vapors and gases which are common to thermal degradation of organic compounds.
- Special fire-fighting procedures/equipment** : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.
- Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.
- Fire hazards/conditions of flammability** : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.
- Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)** : Not flammable.
- NFPA Rating** : 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious 4 - Severe
Health: 1 Flammability 1 Instability 0 Special Hazards: None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.

Emergency Procedures : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.

Methods and materials for containment and cleaning up

: Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

Prohibited materials : None known.

Environmental precautions : Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections : See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures : Wear suitable protective equipment during handling. (See Section 8.) Observe good hygiene standards. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes, skin, or clothing. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Keep container tightly closed.

Storage requirements : Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials : See Section 10.

Special packaging materials : Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits : No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
No hazardous ingredients	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap

Engineering Controls : Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.

Personal Protection Equipment

Eye / face protection : Chemical goggles or safety glasses, as appropriate for the job.

Skin protection : Wear gloves which are impervious to the material. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection : Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection : Under normal conditions of use with adequate ventilation, respiratory protection should not be necessary. If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.

Site safety equipment : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations : Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dust. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands thoroughly. Remove soiled clothing and wash it thoroughly before reuse. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Paste	Appearance	: Beige paste
Odor	: Mild	Odor threshold	: N/Av
pH	: 8.5 – 9.5	Specific gravity	: 1.045
Boiling point	: 212°F (100°C)	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: Miscible
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (<i>n</i>-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: Approximately 53 – 55%
Volatile organic compounds (VOCs)	: 0 g/L SCAQMD 1168		
Particle size	: N/Av	Flammability classification	: Not flammable
Flash point	: >93.3°C (>200°F)	Lower flammable limit (% by vol)	: Not available
Flash point method	: Setaflash closed	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: 25,000 cSt	Oxidizing properties	: Not available
Explosion data: Sensitivity to mechanical impact / static discharge			
	: Not expected to be sensitive to mechanical impact or static discharge.		

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Not reactive.
Stability	: Stable under the recommended storage and handling conditions prescribed.
Hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Extreme heat.
Materials to avoid and incompatibility	: Strong oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin and Eyes</i> : Yes <i>Ingestion</i> : YES
Symptoms of exposure	: See Section 4.
Calculated Acute Toxicity Estimates for the Product	
<i>Inhalation</i>	: > 40 mg/L
<i>Oral</i>	: > 4000 mg/kg
<i>Dermal</i>	: > 4000 mg/kg
Toxicological data	: There are no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

Ingredients	LC50 (4 hr)		LD50	
	Inhalation, rat	Oral, rat	Dermal, rabbit	
No hazardous ingredients.	N/Av	N/Av	N/Av	

Skin corrosion or irritation	: May cause mild irritation to skin.
Serious eye damage / eye irritation	: May cause mild, temporary irritation to eyes.
Respiratory or skin sensitization	: None known.
Germ cell mutagenicity	: None known.
Carcinogenic status	: No components are classified as carcinogenic by IARC, ACGIH, NTP, and OSHA.
Reproductive toxicity	: None known.
Specific Target Organ Toxicity, Single Exposure	: None known.

Specific Target Organ Toxicity, Repeated Exposure

: None known.

Aspiration hazard

: None known.

Additional information

: N/Av

SECTION 12 – ECOLOGICAL INFORMATION

Environmental effects : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

Ecotoxicity : No data available.

Biodegradability : No data available.

Bioaccumulative potential : No data available.

Mobility in soil : No data available.

PBT and vPvB assessment : No data available.

Other adverse effects : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal : Handle waste according to recommendations in Section 7.

Methods of disposal : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

Packaging : Handle contaminated packaging in the same manner as the product.

RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional Information	None				

IATA : Not regulated for Air Transport

IMDG : Not regulated for Ocean Transport

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.

Canadian Environmental Protection Act (CEPA) information: All ingredients appear on the Domestic Substances List (DSL).

US Federal Information:

TSCA: All ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Not Hazardous.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive harm.

Other State Right to Know Laws: Not applicable.

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: 1 Flammability 1 Physical Hazard: 0 PPE: Gloves, safety glasses

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
GHS: Globally Harmonized System
HPR: Hazardous Products Regulations
IARC: International Agency for Research on Cancer
Inh: Inhalation
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. The W.W. Henry Company will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By:
The W.W. Henry Company
400 Ardex Park Drive

Henry® 430 ClearPro™ Clear VCT Floor Adhesive
01-Mar-2015

Aliquippa, PA, U.S.A.
15001

(724) 203-8000
Visit our Website: <http://www.wwhenry.com>

Revision date: : 01-Mar-2015

End of Document

SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's name and address:

HENRY

The W.W. Henry Company
400 Ardex Park Dr.
Aliquippa, PA 15001 USA

Supplier's name and address:

Refer to Manufacturer

Information Telephone No. : (724) 203-8000
Website Address : <http://www.wwhenry.com>
24 Hr Emergency Telephone # : CHEM-TEL: 1-800-255-3924 OR 1-813-248-0585 (call collect)
Product Identifier : Henry® 440 Cove Base Adhesive
Product ID No. : 70010442
Trade Name/Synonyms : Henry 440
Material Use : Adhesive used for the installation of rubber and vinyl cove base.
Uses Advised Against : No information available.

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification per 29 CFR 1910.1200 (OSHA HCS 2012) and HPR (WHMIS 2015)

Not classified as hazardous

GHS Pictograms

None.

Signal Word

None.

Hazard Statements

None.

Safe Handling Instructions:

Avoid eye and skin contact. It is recommended to use safety glasses and gloves during handling. During installation process, adequate ventilation of the work area should be maintained. Although the adhesive is low VOC, persons who are sensitive to odors or chemicals should avoid the work area during installation. Keep container closed.

During normal usage of the product as recommended, airborne dusts and mists will not be present. See Section 7 (Handling and Storage) for further details.

Hazards Not Otherwise Classified

None.

% With Unknown Acute Toxicity : Less than 1% by weight of this product consists of ingredients with unknown acute toxicity.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	% (by weight)
No hazardous ingredients	N/Ap	100

SECTION 4 – FIRST AID MEASURES

- General** : Call a doctor if you feel unwell.
- Inhalation** : If a worker develops breathing problems while working with this material, remove the worker to fresh air and keep at rest in a position comfortable for breathing.
- Skin contact** : Wash with plenty of soap and water. If irritations or symptoms develop, seek medical attention/advice.
- Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- Ingestion** : Rinse mouth. Do NOT induce vomiting. Call a doctor/physician if you feel unwell.
- Notes for Physician** : Treat symptomatically.

Signs and symptoms of short-term (acute) exposure

- Inhalation* : None known.
- Skin* : Symptoms may include mild redness or itching.
- Eyes* : Symptoms may include mild redness, itching, or pain.
- Ingestion* : None known.

Effects of long-term (chronic) exposure

- : None known.

Indication of need for immediate medical attention or special treatment

- : Difficulty breathing persists after removing the person to fresh air.
Any exposure to the eye which causes irritation.

SECTION 5 – FIRE FIGHTING MEASURES

- Suitable extinguishing media** : Carbon dioxide, dry chemical powder, alcohol foam or water spray.
- Unsuitable extinguishing media** : Water jet may spread the burning material.
- Hazardous combustion products** : Carbon monoxide, carbon dioxide, as well as other toxic vapors and gases which are common to thermal degradation of organic compounds.
- Special fire-fighting procedures/equipment** : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes.
- Environmental precautions** : Do not allow material to enter drains or contaminate ground water system.
- Fire hazards/conditions of flammability** : Not flammable under normal conditions of use. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.
- Flammability classification (OSHA 29 CFR 1910.1200, WHMIS 2015)** : Not flammable.
- NFPA Rating** : 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: 1 Flammability 1 Instability 0 Special Hazards: None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate chemically protective equipment.
- Protective equipment** : Refer to Section 8 on this Safety Data Sheet, EXPOSURE CONTROLS / PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
- Emergency Procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).
US CERCLA Reportable quantity (RQ): None reported.

Methods and materials for containment and cleaning up

: Ventilate area of release. Stop spill or leak at source if safely possible. Contain product with inert absorbent material, preventing it from entering sewer lines or waterways. Gather up spilled material and place in suitable container for later disposal (see Section 13). Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.

Prohibited materials

: None known.

Environmental precautions

: Do not allow product to enter drains or waterways. Do not allow material to contaminate ground water system.

Reference to other sections

: See Section 13 for disposal information.

SECTION 7 – HANDLING AND STORAGE

Safe handling procedures

: Wear suitable protective equipment during handling. (See Section 8.) Observe good hygiene standards. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes, skin, or clothing. Sanding and grinding dusts may be harmful if inhaled. When removing this product from existing flooring (i.e. during a renovation), wear safety goggles and respiratory protection from dust due to blasting, chipping, or mechanically pulverizing. Keep container tightly closed.

Storage requirements

: Store in a cool, dry, well-ventilated area. Store away from heat and open flame. Avoid storing in direct sunlight. Store in original container. Keep tightly closed when not in use. Do not reuse empty container without commercial cleaning or reconditioning.

Incompatible materials

: See Section 10.

Special packaging materials

: Always keep in containers made of the same materials as the supply container.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits

: No exposure limits have been established for the product itself. Below are exposure limits for the components in the product.

Ingredients	CAS #	ACGIH TLV		OSHA PEL	
		TWA	STEL	PEL	STEL
No hazardous ingredients	N/Ap	N/Ap	N/Ap	N/Ap	N/Ap

Engineering Controls

: Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits. Ventilation should effectively remove and prevent buildup of any vapor generated from the handling of this product.

Personal Protection Equipment

Eye / face protection

: Chemical goggles or safety glasses, as appropriate for the job.

Skin protection

: Wear gloves which are impervious to the material. Materials such as nitrile rubber or Viton (fluorocarbon rubber) are recommended.

Body protection

: Where extensive exposure to product is possible, use resistant coveralls, apron and boots to prevent contact.

Respiratory protection

: Under normal conditions of use with adequate ventilation, respiratory protection should not be necessary. If work process generates excessive quantities of vapor or dust, or exposures in excess of any PEL, wear an appropriate organic vapor respirator.

Site safety equipment

: An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dust. Do not eat, drink or smoke when using this product. Upon completion of work, wash hands thoroughly. Remove soiled clothing and wash it thoroughly before reuse. Clean all equipment and clothing at end of each work shift.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state

: Paste

Appearance

: Beige, creamy paste

Odor	: Mild	Odor threshold	: N/Av
pH	: 9.4	Specific gravity	: 1.18
Boiling point	: 212°F (100°C)	Coefficient of water/oil distribution	: N/Av
Melting/Freezing point	: N/Av	Solubility in water	: Miscible
Vapor pressure (mm Hg @ 20°C / 68°F)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Vapor density (Air = 1)	: N/Av	Volatiles (% by weight)	: Approximately 35 - 38%
Volatile organic compounds (VOCs)	: 0 g/L SCAQMD 1168		
Particle size	: N/Av	Flammability classification	: Not flammable
Flash point	: >93.3°C (>200°F)	Lower flammable limit (% by vol)	: Not available
Flash point method	: Setflash closed	Upper flammable limit (% by vol)	: Not available
Auto-ignition temperature	: N/Av	Decomposition temperature	: Not available
Viscosity	: N/Av	Oxidizing properties	: Not available

Explosion data: Sensitivity to mechanical impact / static discharge
: Not expected to be sensitive to mechanical impact or static discharge.

SECTION 10 – REACTIVITY AND STABILITY INFORMATION

Reactivity	: Not reactive.
Stability	: Stable under the recommended storage and handling conditions prescribed.
Hazardous reactions	: Hazardous polymerization does not occur.
Conditions to avoid	: Extreme heat.
Materials to avoid and incompatibility	: Strong oxidizing agents.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin and Eyes</i> : Yes <i>Ingestion</i> : YES
Symptoms of exposure	: See Section 4.
Calculated Acute Toxicity Estimates for the Product	
<i>Inhalation</i>	: > 50 mg/L
<i>Oral</i>	: > 5000 mg/kg
<i>Dermal</i>	: > 5000 mg/kg
Toxicological data	: See below for individual ingredient acute toxicity data.

Ingredients	LD50		
	LC50 (4 hr) Inhalation, rat	Oral, rat	Dermal, rabbit
No hazardous ingredients.	N/Av	N/Av	N/Av

Skin corrosion or irritation	: May cause mild irritation to skin.
Serious eye damage / eye irritation	: May cause mild, temporary irritation to eyes.
Respiratory or skin sensitization	: None known.
Germ cell mutagenicity	: None known.
Carcinogenic status	: This product contains less than 0.1% of any component classified as carcinogenic by IARC, ACGIH, NTP, and OSHA. During normal usage of the product as recommended, airborne dusts will not be present. See Section 7 for more information
Reproductive toxicity	: None known.
Specific Target Organ Toxicity, Single Exposure	: None known.
Specific Target Organ Toxicity, Repeated Exposure	

: None known.
Aspiration hazard : None known.
Additional information : N/Av

SECTION 12 – ECOLOGICAL INFORMATION

Environmental effects : The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

Ecotoxicity : No data available.
Biodegradability : No data available.
Bioaccumulative potential : No data available.
Mobility in soil : No data available.
PBT and vPvB assessment : No data available.
Other adverse effects : No data available.

SECTION 13 – DISPOSAL CONSIDERATION

Handling for disposal : Handle waste according to recommendations in Section 7.
Methods of disposal : You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes. Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
Packaging : Handle contaminated packaging in the same manner as the product.
RCRA : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 – TRANSPORTATION INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	None	This product is not regulated according to Canadian TDG regulations.	None	None	None
TDG Additional Information	None				
49 CFR/DOT	None	This product is not regulated according to US DOT regulations.	None	None	None
49 CFR/DOT Additional Information	None				

SECTION 15 – REGULATORY INFORMATION

Canadian Information:

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR). This SDS contains all of the information required by the HPR.
 Canadian Environmental Protection Act (CEPA) information: All ingredients appear on the Domestic Substances List (DSL).

US Federal Information:

TSCA: All ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): None reported.

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Not Hazardous.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above *de minimus* concentrations.

U.S. State Right To Know Laws

California Proposition 65: Warning! This product contains a chemical known to the State of California to cause cancer. It contains trace amounts of Crystalline silica, quartz.

Other State Right to Know Laws: Kaolin [CAS# 1332-58-7] (MN, NJ, PA, RI); Crystalline silica, quartz [CAS# 14808-60-7] (MA, MN, NJ, PA, RI).

SECTION 16 – OTHER INFORMATION

HMIS Rating : * - Chronic Hazard 0 - Minimal 1 – Slight 2 – Moderate 3 – Serious 4 – Severe
Health: 1 Flammability 1 Physical Hazard: 0 PPE: Gloves, safety glasses

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substances List
EPA: Environmental Protection Agency
GHS: Globally Harmonized System
HPR: Hazardous Products Regulations
IARC: International Agency for Research on Cancer
Inh: Inhalation
N/Av: Not Available
N/Ap: Not Applicable
NIOSH: National Institute of Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

Disclaimer of Liability

The Information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

No warranty of any kind is given or implied. The W.W. Henry Company will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein.

Prepared By:
The W.W. Henry Company
400 Ardex Park Drive
Aliquippa, PA, U.S.A.
15001

Henry® 440 Cove Base Adhesive
30-Sep-2015

(724) 203-8000
Visit our Website: <http://www.wwhenry.com>

Revision date: : 30-Sep-2015

End of Document

Material Safety Data Sheet

NON-Hazardous Substance, NON-Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: NYLON TUFTED CARPET TILE ON GLASBAC® BACKING

Recommended use: Carpet floor covering.

Supplier: Interface Aust Pty Limited

ACN: 000 692 026

Street Address: 34 Airds Road
Minto, NSW 2566
Australia

Telephone: + 61 1800 008 101

Website: www.Interface.com.au

24/7 Emergency telephone number: +61 1800 785 277

2. HAZARDS IDENTIFICATION

Based on available information, this material is not classified as hazardous according to criteria of NOHSC Australia.

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

Poisons Schedule (Aust): Not applicable

3. COMPOSITION INFORMATION

CHEMICAL	ENTITY CAS NO.	PROPORTION
Nylon carpet fibre	25038-54-4	12-20%
Polyester cloth	25038-59-9	2-4%
Ethylene Vinyl Acetate	25822-09-7	5%
Limestone (CaCO ₃)	1317-65-3	50-60%
Polyvinyl chloride Virgin Polymer	25035-98-7	10-15%
DINP	68515-48-0	5-10%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 03 474 7000).

Inhalation: Not applicable.

Skin contact: Not applicable.

Eye contact: Not applicable.

Ingestion: Not applicable.

Material Safety Data Sheet

5. FIRE-FIGHTING MEASURES

- Specific hazards:** Not readily combustible, but will support combustion of other materials.
- Fire fighting further advice:** Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.
- Hazchem Code:** Not applicable
- Suitable extinguishing media:** Not readily combustible, however, if material is involved in a fire use; water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

6. ACCIDENTAL RELEASE MEASURES

Pick up large pieces. Sweep up.

Dangerous Goods – Initial Emergency Response Guide No: Not applicable.

7. HANDLING AND STORAGE

- Handling:** Not applicable
- Storage:** Store in a clean, dry place.
Do not double stack pallets.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC Australia).

Biological Limit Values: As per the “National Model Regulations for the Control of Workplace Hazardous Substances [NOHSC: 1005 (1994)]” the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Natural ventilation should be adequate under normal use conditions.

Personal protection equipment: During handling and installation wear standard safety equipment - overalls and safety shoes. Always wash hands before smoking, eating, drinking or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Carpet tile / various colours / relatively odourless.

Solubility: Insoluble in water.

Specific Gravity (20 °C): N Av

Relative Vapour Density (air=1): N App

Vapour Pressure (20 °C): N App

Material Safety Data Sheet

Flash Point:	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N Av
Melting Point/Range (°C):	N App
Boiling Point/Range (°C):	N App
pH:	N App

(Typical values only - consult specification sheet)
N Av = Not available N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability:	This material is thermally stable.
Conditions to avoid:	Extreme heat.
Incompatible:	No information available.
Hazardous decomposition products:	No information available.
Hazardous reactions:	No information available.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation:	Not expected to cause respiratory irritation.
Skin contact:	Not expected to be a skin irritant.
Eye contact:	Not expected to be an eye irritant.
Ingestion:	Not a likely source of exposure. May cause physical obstruction if ingested.
Long Term Effects:	No information available for product.

Acute toxicity / Chronic toxicity

No LD50 data available for the product.

Material Safety Data Sheet

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Ecotoxicity: No information available.

Persistence and degradability: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Best practice is to recover for reuse or reprocessing. Contact Interface for information on how this material can be reprocessed through its ReEntry carpet reprocessing program. For disposal refer to State/Territory Land Waste Management Authority.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.

MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

15. REGULATORY INFORMATION

Poisons Schedule (Aust): Not applicable

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Literary reference

This Material Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd on behalf of its client.

For further information about this product;

Contact: Technical Manager
Interface Aust Pty Limited,
Telephone: + 612 4677 8801

Email: info@interface.com

Reason(s) For Issue: New Contact Details

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

Material Safety Data Sheet

This MSDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Interface Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.

XL Brands 9511 MVRs**XLBrands®**

Version	Revision Date:	MSDS Number:	Date of last issue: -
1.0	09/30/2015	F000001001	Date of first issue: 09/30/2015

SECTION 1. IDENTIFICATION

Product name : XL Brands 9511 MVRs

Product code : F000001001

Manufacturer or supplier's details

Company name of supplier : XL Brands, LLC

Address : 198 Nexus Drive
Dalton GA 30721

Telephone : (800) 367-4583

Telefax : (800) 547-0098

Emergency telephone number : (CHEMTREC): (800) 424-9300 (CHEMTREC International):
(703) 527-3887 Industrial Health/Spill Emergency: (706) 277-
1300 Danny Welch (ehs@trcc.com)

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

If inhaled	: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Call a physician or poison control centre immediately.
In case of skin contact	: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
In case of eye contact	: In case of eye contact, remove contact lens and rinse im- mediately with plenty of water, also under the eyelids, for at least

XL Brands 9511 MVR5**XLBrands®**

Version	Revision Date:	MSDS Number:	Date of last issue: -
1.0	09/30/2015	F00001001	Date of first issue: 09/30/2015

15 minutes.
Keep eye wide open while rinsing.
Seek medical advice.

If swallowed : Do not induce vomiting without medical advice.
If conscious, drink plenty of water.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Foam
Carbon dioxide (CO₂)
ABC powder
Water mist

Specific hazards during fire-fighting : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to health.
Cool closed containers exposed to fire with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Hazardous decomposition products due to incomplete combustion

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
Exposure to decomposition products may be a hazard to health.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Material can create slippery conditions.
Use non-slip safety shoes in areas where spills or leaks can occur.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not let product enter drains.
Do not allow contact with soil, surface or ground water.

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Do not allow uncontrolled discharge of product into the environment.

Methods and materials for containment and cleaning up : Dam up.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up and shovel.
Pick up and transfer to properly labelled containers.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : The product is not flammable. No special protective measures against fire required.

Advice on safe handling : Wear personal protective equipment.
Handle with care.
Take care to avoid waste and spillage when weighing, loading and mixing the product.

Conditions for safe storage : No smoking.
Keep in properly labelled containers.
Observe label precautions.
Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to avoid : Do not freeze.
Keep away from food and drink.
Keep away from tobacco products.

Recommended storage temperature : 4 - 43 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).
Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Use NIOSH approved respiratory protection.

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Hand protection Material	: Impervious gloves
Eye protection	: Safety glasses with side-shields Tightly fitting safety goggles Face-shield
Skin and body protection	: Chemical resistant apron Footwear protecting against chemicals Skin should be washed after contact. Change working clothes after each workshift.
Protective measures	: Avoid contact with skin. When using do not eat, drink or smoke. Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures	: Do not smoke. Keep away from food and drink. Avoid contact with skin, eyes and clothing. Change working clothes after each workshift. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: purple
Odour	: mild, characteristic
pH	: 8.2
Melting point/range	: No data available
Boiling point/boiling range	: 212 °F
Flash point	: > 212 °F
Vapour pressure	: similar to water
Relative density	: similar to water
Density	: 970 kg/m ³

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Solubility(ies)
Water solubility : dispersible

Solubility in other solvents : not determined

Partition coefficient: n-octanol/water : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable

Possibility of hazardous reactions : Stable under recommended storage conditions.

Conditions to avoid : Protect from frost.

Incompatible materials : Oxidizing agents
Strong acids and strong bases

Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

Skin corrosion/irritation**Product:**

Remarks: This information is not available.

Serious eye damage/eye irritation**Product:**

Remarks: This information is not available.

Respiratory or skin sensitisation**Product:**

Remarks: This information is not available.

XL Brands 9511 MVRs**XLBrands®**

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Carcinogenicity**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish :
Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates :
Remarks: No data available

Toxicity to algae :
Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with local regulations.
Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging : Clean container with water.

XL Brands 9511 MVRS**XLBrands®**

Version	Revision Date:	MSDS Number:	Date of last issue: -
1.0	09/30/2015	F000001001	Date of first issue: 09/30/2015

Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

- | | |
|---------------------------|---|
| SARA 302 | : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. |
| SARA 313 | : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. |
| California Prop 65 | This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. |
| TSCA | All components of this product appear on the Inventory of Chemical Substances published by the U.S. Environmental Protection Agency (EPA) under the authority of the Toxic Substances Control Act (TSCA). |

XL Brands 9511 MVRs

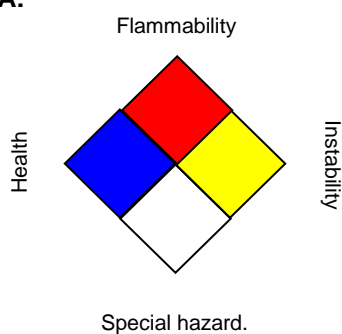
XLBrands®

Version 1.0 Revision Date: 09/30/2015 MSDS Number: F000001001 Date of last issue: -
Date of first issue: 09/30/2015

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 09/30/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN

MATERIAL SAFETY DATA SHEET

SECTION 1. PRODUCT IDENTIFICATION

PRODUCT NAME: Tarkett VinylBond
 DESCRIPTION: Solvent-Free Premium Sheet Vinyl Adhesive

MANUFACTURED FOR: Tarkett Inc. DATE ISSUED: February 22, 2000
 1139 Lehigh Ave.
 Whitehall, PA 18052

EMERGENCY TELEPHONE: 610-266-5500

SECTION 2. HAZARDOUS INGREDIENTS AND EXPOSURE LIMITS

<u>CHEMICAL NAME</u>	<u>CAS NUMBER</u>	<u>% BY WEIGHT</u>	<u>TLV UNITS</u>	<u>OSHA PEL</u>
----------------------	-------------------	--------------------	------------------	-----------------

This product does not contain reportable quantities of hazardous ingredients as defined by OSHA 29 CFR 1910.1200.

This product contains no hazardous ingredients controlled under WHIMS.

SECTION 3. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Beige paste
 ODOR: Slight odor of latex.
 BOILING POINT: 212° F.
 FREEZING POINT: 32° F.
 SPECIFIC GRAVITY (water = 1): N/A
 VAPOR PRESSURE: N/A
 VAPOR DENSITY (air = 1): 1.14
 % VOLATILE BY WEIGHT: No information available.
 SOLUBILITY IN WATER: Soluble
 EVAPORATION RATE: N/A
 pH: 6.4
 GRAMS VOLATILE ORGANIC COMPOUNDS/LITER OF COATING: 0 (Based on no solvent)
 GRAMS VOLATILE ORGANIC COMPOUNDS/LITER OF MATERIAL: 0 (based on no solvent)

SECTION 4. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Eyes
 MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known
 POTENTIAL HEALTH EFFECTS:

EYE CONTACT: May cause slight irritation.
 SKIN CONTACT: May cause slight irritation to certain individuals.
 INGESTION: No effects are suspected under normal professional use.
 INHALATION: Inhalation of vapors should not create any discomfort.

CHRONIC: No effects for chronic exposure are expected.
 CARCINOGENICITY: This product contains no ingredients listed as a carcinogen by IARC, NTP or OSHA.

SECTION 5. FIRST AID MEASURES

EYE CONTACT: Flush eyes with water for at least 15 minutes while holding eyelids open. Contact a physician immediately.

SKIN CONTACT: Remove contaminated clothing and wash contaminated skin with large amounts of water. If irritation persists, contact a physician

INGESTION: Do not induce vomiting. Call a physician immediately.

INHALATION: Remove person to fresh air. Contact a physician.

SECTION 6. FIRE FIGHTING MEASURES

FLASH POINT (° F): None

LOWER FLAMMABLE LIMITS: None

UPPER FLAMMABLE LIMITS: None

FIRE FIGHTING INSTRUCTIONS: Complete protection equipment, including a self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Not sensitive to impact.

EXTINGUISHING MEDIA: Foam, CO₂, dry chemical and/or water spray.

SECTION 7. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Wear protective equipment. Contain by diking with soil or other non-combustible absorbent materials and put into a DOT approved waste container.

SECTION 8. HANDLING AND STORAGE

HANDLING: Use good hygienic practices. Wash hands before eating, using washroom or smoking. Keep out of reach of children

STORAGE: Store and use at room temperature.

SECTION 9. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT:

EYE / FACE PROTECTION: Wear splash goggles if contact with material is likely.

SKIN PROTECTION: Wear impervious gloves if contact with material is likely.

RESPIRATORY PROTECTION: Not normally required with good ventilation.

ENGINEERING CONTROLS: Normal room ventilation.

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known

HAZARDOUS DECOMPOSITION PRODUCTS: Can produce carbon monoxide and carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

No information available.

SECTION 12. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local regulations.

SECTION 13. TRANSPORT INFORMATION

For domestic transportation purpose, this product is not designated as a hazardous material by the U.S. Department of Transportation.

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose or any other warranty is expressed or implies regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

Safety Data Sheet

Kährs HSA - Adhesive

Date of first edition: 12/29/2021

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: Kährs HSA Adhesive

Recommended use of the chemical and restrictions on use

Recommended use: N.A.

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive

33442 - Deerfield Beach - FL - USA

Phone: 954-246-8888

Emergency 24 hour numbers:

(USA) INFOTRAC: 1-800-535-5053

(International) INFOTRAC: +1-352-323-3500

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Carc. 2 Suspected of causing cancer if swallowed.

Label elements

Pictograms and Signal Words



Warning

Hazard statements:

H351 Suspected of causing cancer if swallowed.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification	Registration Number
0.1-0.25 %	Vinyl acetate	CAS:108-05-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; Carc. 2, H351; STOT SE 3, H335; Aquatic Chronic 3, H412; Aquatic Acute 3, H402	

4. FIRST AID MEASURES**Description of first aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

N.A.

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment, and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behavior	Note
Vinyl acetate	ACGIH				10		15		A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; CNS impairment; eye, skin and upper respiratory tract irritation;
	EU			17,6	5	35,2	10	Indicative	
	ACGIH				10		15		A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; CNS impairment; eye, skin and upper respiratory tract irritation
	MAK	SWITZERLAND		35	10				
	MAK	GERMANY		36	10				

Individual protection measures

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: paste white

Odour: N.A.

Odour threshold: N.A.

pH: 9.20

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.25 g/cm³

Solubility in water: dispersible

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

UN number

ADR-UN number: N.A.
 DOT-UN Number: N.A.
 IATA-Un number: N.A.
 IMDG-Un number: N.A.

UN proper shipping name

ADR-Shipping Name: N.A.
 DOT-Proper Shipping Name: N.A.
 IATA-Technical name: N.A.
 IMDG-Technical name: N.A.

Transport hazard class(es)

ADR-Class: N.A.
 DOT-Hazard Class: N.A.
 IATA-Class: N.A.
 IMDG-Class: N.A.

Packing group

ADR-Packing Group: N.A.
 DOT-Packing group: N.A.
 IATA-Packing group: N.A.
 IMDG-Packing group: N.A.

Environmental hazards

Marine pollutant: No
 Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

15. REGULATORY INFORMATION**USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

Vinyl acetate is listed in TSCA Section 8b

SARA - Superfund Amendments and Reauthorization Act**Section 302 - Extremely Hazardous Substances:**

Vinyl acetate

Section 304 - Hazardous substances:

Vinyl acetate

Section 313 - Toxic chemical list:

Vinyl acetate

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**Substance(s) listed under CERCLA:**

Vinyl acetate Reportable quantity: 5000 pounds

CAA - Clean Air Act**CAA listed substances:**

Vinyl acetate is listed in CAA Section 112(b) - HAP Section 112(b) - HON

CWA - Clean Water Act**CWA listed substances:**

Vinyl acetate is listed in CWA Section 311

USA - State specific regulations**California Proposition 65****Substance(s) listed under California Proposition 65:**

no substances listed

Massachusetts Right to know**Substance(s) listed under Massachusetts Right to know:**

Vinyl acetate

Pennsylvania Right to know**Substance(s) listed under Pennsylvania Right to know:**

Vinyl acetate

New Jersey Right to know**Substance(s) listed under New Jersey Right to know:**

Vinyl acetate

Canada - Federal regulations**DSL - Domestic Substances List****DSL Inventory:**

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List**NDSL Inventory:**

no substances listed

NPRI - National Pollutant Release Inventory**Substances listed in NPRI:**

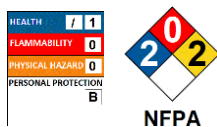
no substances listed

16. OTHER INFORMATION

Code	Description
H225	Highly flammable liquid and vapour.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer .
H351	Suspected of causing cancer if swallowed.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet dated: 3/9/2020 - version 1

Product code: 3253-51

Additional classification information

HMIS Health: 1 = Slight

HMIS Flammability: 0 = Not Combustible

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 2 = Moderate

NFPA Flammability: 0 = Not Combustible

NFPA Reactivity: 2 = Moderate

NFPA Special Risk: NONE

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and

believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

30201/ P8

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

UPOFLOOR 5300 PSA

30202/ P1

Version 0.0 Revision Date: 05/20/2015 MSDS Number: Date of last issue: -
 Date of first issue: 05/20/2015

SECTION 1. IDENTIFICATION

Product name : UPOFLOOR 5300 PSA

Product code :

Manufacturer or supplier's details

Company name of supplier : UPOFLOOR Americas, Inc.

Address : Oasis Office Center
 940 Centre Circle #100
 Altamonte Springs, FL 32714

Telephone : (800) 800-5247

Telefax :

Emergency telephone number : (CHEMTREC): (800) 424-9300 (CHEMTREC International):
 (703) 527-3887 Industrial Health/Spill Emergency: (706) 277-
 1300 Danny Welch (ehs@trcc.com)

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

Chemical Name	CAS-No.	Concentration (%)
urea	57-13-6	>= 1 - < 5
quartz (SiO ₂)	14808-60-7	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air in case of accidental inhalation of vapours.
 Oxygen or artificial respiration if needed.
 Call a physician or poison control centre immediately.

In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
 If skin irritation persists, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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Keep eye wide open while rinsing.
Seek medical advice.

If swallowed : Do not induce vomiting without medical advice.
If conscious, drink plenty of water.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Foam
Carbon dioxide (CO₂)
ABC powder
Water mist

Specific hazards during fire-fighting : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to health.
Cool closed containers exposed to fire with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Hazardous decomposition products due to incomplete combustion

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
Exposure to decomposition products may be a hazard to health.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Material can create slippery conditions.
Use non-slip safety shoes in areas where spills or leaks can occur.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not let product enter drains.
Do not allow contact with soil, surface or ground water.
Do not allow uncontrolled discharge of product into the environment.

UPOFLOOR 5300 PSA

30202/ P3

Version 0.0 Revision Date: 05/20/2015 MSDS Number: Date of last issue: -
 Date of first issue: 05/20/2015

Methods and materials for containment and cleaning up : Dam up.
 Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
 Sweep up and shovel.
 Pick up and transfer to properly labelled containers.
 Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : The product is not flammable. No special protective measures against fire required.

Advice on safe handling : Wear personal protective equipment.
 Handle with care.
 Take care to avoid waste and spillage when weighing, loading and mixing the product.

Conditions for safe storage : No smoking.
 Keep in properly labelled containers.
 Observe label precautions.
 Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to avoid : Do not freeze.
 Keep away from food and drink.
 Keep away from tobacco products.

Recommended storage temperature : 4 - 43 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
urea	57-13-6	TWA	10 mg/m ³	US WEEL
quartz (SiO ₂)	14808-60-7	TWA (Respirable fraction)	0.025 mg/m ³	ACGIH
		TWA (total dust)	30 mg/m ³ /%SiO ₂ +2	OSHA Z-3
		TWA (respirable)	10 mg/m ³ /%SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf/%SiO ₂ +5	OSHA Z-3

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).
 Maintain air concentrations below occupational exposure standards.

SAFETY DATA SHEET

UPOFLOOR

UPOFLOOR 5300 PSA

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Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Use NIOSH approved respiratory protection.
- Hand protection
Material : Impervious gloves
- Eye protection : Safety glasses with side-shields
Tightly fitting safety goggles
Face-shield
- Skin and body protection : Chemical resistant apron
Footwear protecting against chemicals
Skin should be washed after contact.
Change working clothes after each workshift.
- Protective measures : Avoid contact with skin.
When using do not eat, drink or smoke.
Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene measures : Do not smoke.
Keep away from food and drink.
Avoid contact with skin, eyes and clothing.
Change working clothes after each workshift.
Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : paste
- Colour : white
- Odour : mild
characteristic
- pH : 8.0 - 9.0
- Melting point/range : No data available
- Boiling point/boiling range : 212 °F
- Flash point : > 212 °F

SAFETY DATA SHEET

UPOFLOOR

UPOFLOOR 5300 PSA

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Vapour pressure	:	similar to water
Density	:	960 - 1,010 kg/m ³
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	Not applicable
Partition coefficient: n-octanol/water	:	No data available
Explosive properties	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	Protect from frost.
Incompatible materials	:	Oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Remarks: This information is not available.

Skin corrosion/irritation**Product:**

Remarks: This information is not available.

Serious eye damage/eye irritation**Product:**

Remarks: This information is not available.

SAFETY DATA SHEET

UPOFLOOR

UPOFLOOR 5300 PSA

Version Revision Date: MSDS Number: Date of last issue: -
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Respiratory or skin sensitisation**Product:**

Remarks: This information is not available.

Carcinogenicity**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish :
Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates :
Remarks: No data available

Toxicity to algae :
Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with local regulations.
Can be landfilled or incinerated, when in compliance with local regulations.

Contaminated packaging : Clean container with water.

UPOFLOOR 5300 PSA

30202/ P6

Version	Revision Date:	MSDS Number:	Date of last issue: -
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Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**SARA 302**

: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

UPOFLOOR 5300 PSA

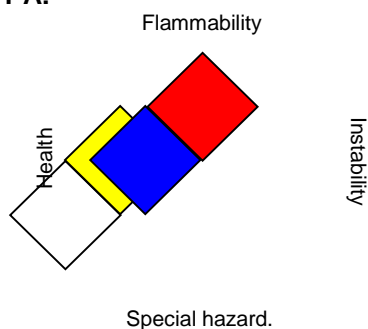
30202/ P7

Version 0.0 Revision Date: 05/20/2015 MSDS Number: Date of last issue: -
 Date of first issue: 05/20/2015

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

Revision Date : 05/20/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / EN



Safety Data Sheet
Weld-Crete®

Revision date 3/09/2015

1. Product and Company Identification

Company

Larsen Products Corp.
8264 Preston Court
Jessup, MD 20794
800-633-6668

2. Hazards Identification

Emergency Overview

Irritant - Skin: may cause skin irritation.

Eye: vapors may cause eye irritation

Respiratory tract: inhalation of vapor may cause irritation to the respiratory tract. Use in a well ventilated area.

Hazard classification

This product has not been classified as hazardous to the legislation in force.

3. Composition/Information on Ingredients

Ingredient name	CAS NO	Content
Poly vinyl acetate homopolymer	none	< 50%
Benzoate esters	proprietary	< 4%
Larsen blend	proprietary	< 2%

4. First Aid Measures

Eyes: Wash affected eyes for at least 15 minutes with clean water. Get immediate medical attention.

Skin: Wash with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Wash contaminated clothing.

Inhalation: Move to fresh air. If symptoms develop or persist get medical attention.

Ingestion: Give victim one or two glasses of water or milk. Induce vomiting. Get immediate medical attention.

5. Fire Fighting Measures

Flash point:	Not applicable
Extinguishing media:	Use extinguishing measure appropriate to local circumstances and surrounding environment. Material does not burn.
Fire fighting procedures:	Fire fighters should wear positive self-contained breathing apparatus. Wear full protective clothing.
Hazardous decomposition products:	Carbon dioxide, harmful vapors, nitrogen oxides, carbon black, acetic acid.
Fire and explosion hazards:	None

6. Accidental Release Measures

Personal precautions:	Immediately contact emergency personnel. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Handle in accordance with good building materials hygiene and safety practice.
Environmental precautions:	Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.
Clean up:	Pick up with absorbent material. Shovel material and place in a closed container for disposal

7. Handling and Storage

Handling:	Avoid aerosol formation. Avoid inhalation of mists/vapors. No special measures necessary provided product is used correctly.
Storage:	Keep product in original container in a well ventilated area. Keep from freezing.

8. Exposure Controls and Personal Protection

Exposure Guidelines	Ethylene Glycol	107-21-1		
	ACGIH	Ceiling limit value	100mg/m3	aerosol
	Hexylene Glycol	107-41-5		
	ACGIH	Ceiling limit value	25 ppm	
	NIOSH	Ceiling limit value	25 ppm	
	NIOSH	Ceiling limit value	125 mg/m3	

Respiratory protection: Wear respiratory protection if ventilation is inadequate.

Hand protection: Wear chemical resistant gloves. Manufacturer's directions for use should be observed.

Eye protection: Safety glasses with side shields.

Body protection: Light protective clothing.

9. Physical and Chemical Properties

Form:	Liquid
Odor:	Low to slight acetic
Color:	Blue
pH:	4-5
Boiling range:	182.22-340 C
Vapor density:	less than water
Flash point:	NA

10. Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Conditions to avoid:	None known
Materials to avoid:	Strong acids, strong oxidizing agents, strong bases, strong reducing agents.
Hazardous reactions:	Stable if stored and handled as prescribed.
Decomposition products:	No hazardous decomposition products if stored and handled as prescribed.

11. Toxicological Information

Acute oral toxicity:	Ethylene glycol	LD50	6140mg/kg species rat
	Hexylene glycol	LD50	3700mg/kg species rat
		LD50	4790mg/kg species rat remarks:LD50
		LD 50	3500mg/kg species mouse remarks:LD50
Acute inhalation toxicity:	Hexylene glycol	LC50	>18000 ppm exposure time 8h species rat
	Benzoate esters	LC50	>200m/g/l exposure time 4h species rat

Acute dermal toxicity:	Ethylene glycol	LD50	9530mg/kg species rabbit
	Hexylene glycol	LD50	12300mg/kg species rabbit
	Benzoate esters	LD50	2000mg/kg species rat

12. Ecological Information

Degradability/Persistence
Biological/Abiological degradation

Evaluation: Inherently biodegradable.

13. Disposal Considerations

Waste disposal method: Dispose of contents/container in accordance with local and national regulations. Contents should not be released into the environment.

Container disposal method: Empty containers should be taken to an approved waste site for recycling or disposal.

14. Transport Information

Land transport	
TDG	Not classified as dangerous under transport regulations.
Sea transport	
IMDG	Not classified as dangerous under transport regulations.
Air transport	
IATA/ICAO	Not classified as dangerous under transport regulations

15. Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS :	not controlled
SARA 311/312:	Ethylene glycol <1%
California Prop.65	Does not contain chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other information

Hazardous Material Information System (USA)

Health	1
Fire hazard	0
Reactivity	0

Disclaimer

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MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: V-82 Commercial Adhesive

Chemical Name: Resilient flooring adhesive

Product Use/Class: Resilient flooring adhesive

Company Information: Mannington Mills, Inc.
P.O. Box 30 - Route 45
75 Mannington Mills Road
Salem, New Jersey 08079

Phone Numbers: General: (856) 935-3000
Product Emergency: (866) 359-5602
Transport Emergency Contact:
Within the U.S. - CHEMTREC: (800) 424-9300
Outside the U.S. - CHEMTREC: +1-703-527-3887

Effective Date: July 12, 2011 **Supersedes Date:** January 2, 2009

Reason for Revision: Update

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %	Exposure Guidelines				
			ACGIH - TLV		OSHA - PEL		Other
			TWA	STEL	TWA	Ceiling	
None per OSHA Standard 29 CFR 1910.1200 & SARA Title III, Section 313							

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Form: Off white colored paste

Color: Off white

Odor: Slight odor, latex

WARNING STATEMENTS

None

POTENTIAL HEALTH EFFECTS

Primary Routes of Exposure

Eye Contact: Eye irritation only expected if solid material enters eye or if ventilation is poor. Irritation expected to be temporary.

Skin Contact: The product could be slightly irritating to some individuals.

Inhalation: Should not create any discomfort.

Ingestion: No effects are suspected under normal professional use.

Chronic: No severe effects are suspected under normal professional use.

Other: Medical Conditions Aggravated by Exposure: Allergies, skin and respiratory disorders. Product sensitivity.

Refer to Section 11 for toxicological information.

SECTION 4 - FIRST AID MEASURES

If in Eyes: Flush eyes for 15 minutes with water while holding eyelids open. Seek medical attention.

If on Skin: Immediately wash affected area with soap and water. Remove contaminated clothing. Contact a physician if irritation persists.

If Inhaled: Move patient to fresh air. If not breathing, trained personnel should administer artificial respiration. Get immediate medical attention.

If Swallowed: Do not induce vomiting. Contact a physician or poison control center immediately.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: N.A.

Lower Explosive Limit (LEL) %: N.A.

Upper Explosive Limit (UEL) %: N.A.

Auto-Ignition Temperature: N.A.

OSHA Flammability Classification: N.A.

Hazardous Products of Combustion: N.A.

Extinguishing Media: Water spray, carbon dioxide, dry chemical, or foam.

Unusual Fire and Explosion Hazards: None known.

Fire Fighting Equipment: Wear protective equipment including self-contained breathing apparatus with full face piece operated in pressure-demand. Use a jet of water to refresh the surface exposed to flames as well as the contents. Not sensitive to static electricity.

Miscellaneous Advice: Product will not burn until all water has evaporated.

Refer to Section 10 for additional information.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use appropriate protective equipment. Wear impervious/neoprene gloves. Use safety glasses.

Methods for Clean-up: Contain with sand, earth, or other absorbent material to prevent from entering water or sewage systems. Product is not a liquid so can be easily contained. Put in approved waste container.

Refer to Section 13 for disposal information.

Refer to Sections 14 and 15 for reportable quantity information.

SECTION 7 - HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Avoid prolonged skin contact.

Storage: Keep containers tightly closed when not in use and during transport. Protect it from freezing. Do not puncture. Store in a cool, dry place (50-90 deg F). Keep out of the reach of children.

Consult the Mannington Professional Installation Handbook for additional information on handling and storage.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use only in well ventilated areas. Local exhaust at point of use is preferable.

Respiratory Protection: Not normally required, assuming adequate ventilation provided. Use NIOSH approved organic vapor/mist respirator if irritation occurs.

Eye Protection: Not normally required. Safety glasses if eye contact is probable.

Hand and Skin Protection: Not normally required, unless prolonged contact is expected. May use chemical resistant gloves.

Other Protective Equipment: None

Hygienic Practices: Always wash hands before eating, smoking or using toilet facilities. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-white paste

Physical State: Solid

Melting Point: 0 deg C

Boiling Point: > 212 deg F

Density: 11 lbs/gal

Vapor Density: N/A

Specific Gravity (Water = 1.0):

Water Solubility: Miscible (dispersible)

Volatiles (Wt. %): Approx 75%

VOC (calculated): 38 grams/liter (solvent-free)

Vapor Pressure: Approx same as water

Evaporation Rate: Same as water

pH: N/A

Decomposition Temperature: N/E

SECTION 10 - STABILITY AND REACTIVITY

Conditions to Avoid: None known

Materials to Avoid: Strong oxidizing agents, strong acids, and strong bases.

Stability: Stable

Hazardous Reactions: N.A.

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of nitrogen and other unidentified organic compounds.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 (Oral):

Product LD50 (Dermal):

Product LC50:

Immediate (Acute) Effects: Ingestion - no effects are suspected under normal professional use.

Inhalation - inhalation of fumes should not create any discomfort. Skin Contact - the product could be slightly irritating to some individuals, Eye Contact - could be slightly irritating.

Delayed (Subchronic & Chronic) Effects: Data not available; however no severe effects for chronic exposure are expected. Carcinogenicity - no, Reproduction - N.A., Teratogenicity - N.A., Mutagenicity - N.A., Synergicity Products - N.A.

SECTION 12 - ECOLOGICAL INFORMATION

None known

SECTION 13 - DISPOSAL CONSIDERATIONS

US EPA RCRA Status: N.A.

Disposal Considerations: N.A.

Disposal Method: Allow to dry, then dispose of in a proper manner.

Miscellaneous: Disposal should be done in accordance with all local, state and federal (40 CFR Part 261) regulations. Be aware that state and local requirements differ widely depending on location and may in many cases be different from federal rules.

SECTION 14 - TRANSPORT INFORMATION

The information provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transport.

DOT Proper Shipping Name: Not regulated

DOT Hazard Class: Not regulated

DOT UN/NA Number: Not regulated

Packing Group: Not regulated

Product Emergency: (866) 359-5602

Transport Emergency Contact:

Within the U.S. - CHEMTREC: (800) 424-9300

Outside the U.S. - CHEMTREC: +1-703-527-3887

Other:

SECTION 15 - REGULATORY INFORMATION

U.S. Federal Regulations: Not available
SARA Section 313: None
Toxic Substances Control Act: Not available
Inventory Status: Not available
Export Notification: Not available
Other:

SECTION 16 - OTHER INFORMATION

Hazard Ratings	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating				

Disclaimer:

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date of hereof, the company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will the company be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

Legend:

N.E. - Not Established	S - Skin
N.A. - Not Available	ppm - Parts per Million
N/A - Not Applicable	° F. - Degrees Fahrenheit
C - Ceiling (Exposure Levels)	° C. - Degrees Centigrade
PEL - Permissible Exposure Limits	STEL - Short-Term Exposure Limit
OEL - Occupational Exposure Limit	CIH - Certified Industrial Hygienist
TSCA - Toxic Substances Control Act	TWA - Time Weighted Average
NFPA - National Fire Protection Association	
TLV - Exposure Limits Developed by ACCIH	
MSHA - Mine Safety and Health Administration	
NIOSH - National Institute for Occupational Safety	
OSHA - Occupational Safety and Health Administration	
HAZCOM - Hazard Communication Standard (29CFR1910.1200)	
ACGIH - American Conference of Government Industrial Hygienists	
CERCLA - Comprehensive Environmental Response, Comprehensive and Liability Act	

xpressSTEP Premium – LVT Plank Tile; Spray Flooring Adhesive



Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 4/25/2017 Date of issue: 4/25/2017

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Proprietary Acrylic Blend

Product Name: xpressSTEP Premium – LVT Plank Tile; Spray Flooring Adhesive

1.2. Intended Use of the Product

Use of the substance/mixture: Adhesive

1.3. Name, Address, and Telephone of the Responsible Party

Mannington Mills, Inc.

P.O. Box 30 – Route 45

75 Mannington Mills Road

Salem, New Jersey 08079 U.S.A.

General Information: (856) 935-3000

1.4. Emergency Telephone Numbers

: **Product/Medical Emergency Phone Number (24 Hours): (866) 359-5602**

: **Transport Emergency:**

Within the U.S. - CHEMTREC: (800) 424-9300

Outside the U.S. – CHEMTREC: +1-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Gases under pressure – Dissolved gas

Carcinogenicity 2

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS04

GHS08

Signal Word (GHS-US)

: Warning

Hazard Statements (GHS-US)

: Contains gas under pressure; may explode if heated. Suspected of causing cancer.

Precautionary Statements (GHS-US)

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. Store locked up. Protect from sunlight. Store in a well-ventilated place. Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.3. Other Hazards

No additional information available

2.4. Unknown Acute Toxicity (GHS-US)

56 % of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
1,1-Difluoroethane	(CAS No)75-37-6	10 – 30	Flam. Gas 1 Liquefied gas
Vinyl acetate	(CAS No)108-05-4	0.1 – 1	Flam. Liq. 2 Acute Tox. 4 (Inhalation) Carc. 2 STOT SE 3

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General:

First-aid Measures After Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

First-aid Measures After Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid Measures After Eye Contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid Measures After Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries:

Symptoms/Injuries After Inhalation: May cause respiratory tract irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/Injuries After Eye Contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/Injuries After Ingestion: Not a normal route of exposure.

Chronic Symptoms:

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Products of combustion may include, and are not limited to: oxides of carbon

5.3. Advice for Firefighters

Firefighting Instructions: Cool closed containers exposed to fire with water.

Protection During Firefighting: Containers may explode when heated. Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ruptured cylinders may rocket.

xpressSTEP Premium – LVT Plank Tile; Spray Flooring Adhesive

Safety Data Sheet

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6.2. Methods and Material for Containment and Cleaning Up

For Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning Up: Scoop up material and place in a disposal container. Provide ventilation.

6.3. Reference to Other Sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling: Keep away from sources of ignition. - No smoking. Avoid contact with skin and eyes. Avoid breathing vapor or mist. Use only in well-ventilated areas. When using do not eat, drink or smoke. Pressurized container: Do not pierce or burn, even after use.

Hygiene Measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Keep locked up and out of reach of children. Store away from direct sunlight or other heat sources. Do not store at temperatures above 49 °C / 120 °F. Keep from freezing. Store in a well ventilated place.

7.3. Specific End Use(s)

Not available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

1,1-Difluoroethane (75-37-6)		
USA ACGIH	ACGHI TWA (ppm)	Not applicable
USA ACGIH	ACGHI STEL (ppm)	Not applicable
Vinyl acetate (108-05-4)		
USA ACGIH	ACGHI TWA (ppm)	10 ppm
USA ACGIH	ACGHI STEL (ppm)	15 ppm

8.2. Exposure Controls

Appropriate Engineering Controls	: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.
Hand Protection	: Wear suitable gloves.
Eye Protection	: Safety glasses or goggles recommended when using product.
Skin and Body Protection	: Wear suitable protective clothing.
Respiratory Protection	: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental Exposure Controls	: Maintain levels below community environmental protection thresholds.
Other Information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Gas / Pressurized Liquid.
Appearance	: Clear.
Odor	: Sweet.
Odor Threshold	: No data available.
pH	: 5.5 – 7.5
Evaporation Rate	: No data available.
Melting Point	: No data available.
Freezing Point	: No data available.
Boiling Point	: No data available.

xpressSTEP Premium – LVT Plank Tile; Spray Flooring Adhesive

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Flash Point	: No data available.
Auto-ignition Temperature	: No data available.
Decomposition Temperature	: No data available.
Flammability (solid, gas)	: Not Flammable.
Vapor Pressure	: No data available.
Relative Vapor Density at 20 °C	: > 1 (Air = 1)
Relative Density	: 1.03
Solubility	: No data available.
Log Pow	: No data available.
Log Kow	: No data available.
Viscosity, kinetic	: No data available.
Viscosity, dynamic	: No data available.
Explosive properties	: No data available.
Oxidizing properties	: No data available.
Explosive limits	: No data available.

9.2. Other Information

VOC Content <0.020 g/l

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** No dangerous reaction known under conditions of normal use.
- 10.2. Chemical Stability:** Stable under normal storage conditions. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Keep in a cool place.
- 10.3. Possibility of Hazardous Reactions:** No dangerous reaction known under conditions of normal use.
- 10.4. Conditions to Avoid:** Heat. Incompatible materials.
- 10.5. Incompatible Materials:** Oxidizers. Nitrates. Chlorine bleach.
- 10.6. Hazardous Decomposition Products:** May include, but are not limited to: oxides of carbon.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

xpressSTEP Premium	
LD50 Oral Rat	Not available
LD50 Dermal Rabbit	Not available
LC50 Inhalation Rat	Not available
1,1-Difluoroethane (75-37-6)	
LC50 Inhalation Rat	977 g/m ³ /2h
Vinyl acetate (108-05-4)	
LD50 Oral Rat	2920 mg/kg
LD50 Dermal Rabbit	2320 mg/kg
LC50 Inhalation Rat	11.4 mg/l/4h

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious Eye Damage/Irritation: Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitization: Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Suspected of causing cancer.

Vinyl acetate (108-05-4)	
IARC group	2B – Possibly carcinogenic to humans.

Reproductive toxicity: Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (Single Exposure): Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (Repeated Exposure): Based on available data, the classification criteria are not met.

Aspiration Hazard: Based on available data, the classification criteria are not met.

Symptoms/Injuries After Inhalation: May cause respiratory tract irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/Injuries After Eye Contact: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/Injuries After Ingestion: Not a normal route of exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology – general: May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and Degradability: Not established

12.3. Bioaccumulative Potential: Not established

12.4. Mobility in Soil: No additional information available.

12.5. Other Adverse Effects

Effect on ozone layer: No additional information available.

Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Pressurized container: Do not pierce or burn, even after use.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT

14.1. UN Number

UN-No. (DOT) : UN1950

14.2. UN Proper Shipping Name

Proper Shipping Name : Aerosols, non-flammable

Hazard Class : 2.2

Hazard Labels (DOT) :



14.3. Additional Information

Other Information : No supplementary information available.

Packing Group : Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Vinyl acetate (108-05-4)	
Listed on SARA Section 302 (Specific toxic chemical listings)	
Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 302 Threshold Planning Quantity (TPQ)	1000
SARA Section 313 - Emission Reporting	0.1%

15.2. US State Regulations

xpressSTEP	
State or local regulations	This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date	: 4/25/17 Added VOC Content in Section 9.2
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

SKU: 804876
DATE: 4/25/17
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**MT-711**

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 06/18/2015

Date of issue: 06/18/2015

Version: 1.0

SECTION 1: IDENTIFICATION**1.1. Product Identifier****Product Form:** Mixture**Product Name:** MT-711**1.2. Intended Use of the Product****Use of the substance/mixture:** No use is specified**1.3. Name, Address, and Telephone of the Responsible Party****Mannington Mills, Inc.****P.O. Box 30 – Route 45****75 Mannington Mills Road****Salem, New Jersey 08079 U.S.A.****General Information: (856) 935-3000****1.4. Emergency Telephone Numbers**: **Product/Medical Emergency Phone Number (24 Hours): (866) 359-5602**: **Transport Emergency:****Within the U.S. - CHEMTREC: (800) 424-9300****Outside the U.S. – CHEMTREC: +1-703-527-3887****SECTION 2: HAZARDS IDENTIFICATION****2.1. Classification of the Substance or Mixture****Classification (GHS-US)**

Aquatic Acute 2 H401

Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

2.2. Label Elements**GHS-US Labeling****Hazard Statements (GHS-US)**

: H401 - Toxic to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US)

: P273 - Avoid release to the environment.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

The dried or powdered form of this substance may form combustible dust concentrations in air.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substance**

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Proprietary	Proprietary	Proprietary	Muta. 1B, H340 Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Proprietary	Proprietary	Proprietary	Not classified
Proprietary	Proprietary	Proprietary	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

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Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Rinse affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.

First-aid Measures After Ingestion: Do not induce vomiting. Rinse mouth. Get medical advice and attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Contains substances that are combustible dusts. If dried and allowed to accumulate, may form combustible dust concentrations in air that could ignite and cause an explosion. Take appropriate precautions.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. If dust is present at significant quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other Information: Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid skin and eye contact. Avoid breathing dust, vapor, mist, or spray.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. If dust generation is possible: Avoid generation of dust during clean-up of spills. If using vacuum, use explosion proof vacuum during cleanup, with appropriate filter, and do not mix with other materials. Contact competent authorities after a spill.

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6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.**Storage Conditions:** Store in a dry, cool, and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures, and incompatible materials.**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s)

No use is specified.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Proprietary Component		
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)

8.2. Exposure Controls

Appropriate Engineering Controls

: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment

: Protective goggles. Gloves. Protective clothing.



Materials for Protective Clothing

: Chemically resistant materials and fabrics.

Hand Protection

: Wear chemically resistant protective gloves.

Eye Protection

: Chemical safety goggles.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental Exposure Controls

: Do not allow the product to be released into the environment.

Consumer Exposure Controls

: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: White Paste
Odor	: Characteristic
Odor Threshold	: No data available
pH	: 7.2
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: 100 °C (212 °F)
Flash Point	: No data available

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Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: 23 hPa (17 mm Hg) at 20 °C (68 °F)
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 1.02 g/cm ³ (8.512 lbs/gal) at 20 °C (68 °F)
Solubility	: Water: Not miscible or difficult to mix
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

9.2. Other Information No additional information available **VOC Content:** <1g/L

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates: Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Proprietary Component	
LD50 Oral Rat	> 5050 mg/kg
LD50 Dermal Rabbit	> 2000
LC50 Inhalation Rat	> 5 mg/l/4h
Proprietary Component	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
Proprietary Component	
LD50 Oral Rat	1470 mg/kg
ATE (Dust/Mist)	1.50 mg/l/4h

Skin Corrosion/Irritation: Not classified

pH: 7.2

Serious Eye Damage/Irritation: Not classified

pH: 7.2

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation

Symptoms/Injuries After Skin Contact: May cause skin irritation

Symptoms/Injuries After Eye Contact: May cause eye irritation

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects

Chronic Symptoms: None expected under normal conditions of use

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General : This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

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Proprietary Component	
LC50 Fish 1	0.01 mg/l
EC50 Daphnia 1	0.11 mg/l (Exposure Time: 48 h - Species:Daphnia magna)
ErC50 (algae)	0.34 mg/l
NOEC chronic crustacea	0.0031 mg/l
Proprietary Component	
LC50 Fish 1	0.14 - 0.32 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC 50 Fish 2	0.049 - 0.079 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

12.2. Persistence and Degradability No additional information available**12.3. Bioaccumulative Potential** No additional information available**12.4. Mobility in Soil** No additional information available**12.5. Other Adverse Effects**

No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods****Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.**SECTION 14: TRANSPORT INFORMATION****14.1. In Accordance with DOT** Not regulated for transport**14.2. In Accordance with IMDG** Not regulated for transport**14.3. In Accordance with IATA** Not regulated for transport**SECTION 15: REGULATORY INFORMATION****15.1 US Federal Regulations**

Proprietary Component	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
Proprietary Component	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Proprietary Component	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	1.0 %

15.2 US State Regulations

Proprietary Component	
U.S. - New Jersey - Right to Know Hazardous Substance List	
Proprietary Component	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	
Proprietary Component	
U.S. - New Jersey - Right to Know Hazardous Substance List	

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 06/18/2015
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4

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Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Flam. Liq. 3	Flammable liquids Category 3
Muta. 1B	Germ cell mutagenicity Category 1B
Repr. 1B	Reproductive toxicity Category 1B
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Sens. 1	Skin sensitization Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
Comb. Dust	May form combustible dust concentrations in air
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H340	May cause genetic defects
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

Safety Data Sheet

ULTRAPLAN M20 PLUS

Safety Data Sheet dated: 4/24/2015 - version 1

Date of first edition: 4/24/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: ULTRAPLAN M20 PLUS

Recommended use of the chemical and restrictions on use

Recommended use: Cement Based Self Leveling Compound

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Classification of the chemical

- Eye Dam. 1 Causes serious eye damage.
- Skin Sens. 1 May cause an allergic skin reaction.
- Carc. 1A May cause cancer if inhaled.
- STOT RE 1 Causes damage to organs through prolonged or repeated exposure if inhaled.

Label elements

Symbols:



Danger

Code	Description
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.
Code	Description
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260.B	Do not breathe dust.
P264.3	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280.I	Wear protective gloves and eye protection.
P302+P352.A	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310.A	Immediately call a POISON CENTER.
P314	Get medical advice/attention if you feel unwell.
P321.A	Specific treatment (see supplementary instructions on this label)

P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P405	Store locked up.
P501.A	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substances**

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification
40-60 %	Silica Sand	CAS:14808-60-7	Carc. 1A, H350.A; STOT RE 1, H372.A
1-5 %	Portland cement	CAS:65997-15-1	STOT SE 3, H335; Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Irrit. 2, H315

4. FIRST AID MEASURES**Description of first aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).**Unsuitable extinguishing media:**

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

- Provide adequate ventilation.
- Use appropriate respiratory protection.
- See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Wash with plenty of water.

7. HANDLING AND STORAGE

Precautions for safe handling

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Exercise the greatest care when handling or opening the container.
- Use localized ventilation system.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

- Storage temperature: N.A.
- Incompatible materials:
 - None in particular.
- Instructions as regards storage premises:
 - Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Note
Silica Sand	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
Portland cement	OSHA			15					
	OSHA			5					
	ACGIH			1					A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma;

Appropriate engineering controls: N.A.

Individual protection measures

- Eye protection:
 - Use close fitting safety goggles, don't use eye lens.
- Protection for skin:
 - Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
- Protection for hands:
 - Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
- Respiratory protection:
 - Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- Physical state: Solid
- Appearance and colour: Powder grey
- Odour: Cement like
- Odour threshold: N.A.
- pH in Water Dispersion: 12.00
- Melting point / freezing point: N.A.
- Initial boiling point and boiling range: N.A.
- Flash point: Not Applicable
- Evaporation rate: N.A.
- Upper/lower flammability or explosive limits: N.A.
- Vapour density: N.A.
- Vapour pressure: N.A.

Relative density: N.A.
 Solubility in water: Soluble
 Solubility in oil: N.A.
 Partition coefficient (n-octanol/water): N.A.
 Auto-ignition temperature: N.A.
 Decomposition temperature: N.A.
 Viscosity: N.A.
 Explosive properties: N.A.
 Oxidizing properties: N.A.
 Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
 Miscibility: N.A.
 Fat Solubility: N.A.
 Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Silica Sand	a) acute toxicity	LD50 Oral Rat = 500mg/kg
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If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

Silica Sand	Group 1
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Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. ECOLOGICAL INFORMATION**Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
40-60 %	Silica Sand	CAS: 14808-60-7	LC50 a) Aquatic acute toxicity carp> 10000,00000mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules). Do not dump into sewers, any body of water or onto the ground.

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION**UN number**

ADR-UN number: N/A

DOT-UN Number: N/A

IATA-Un number: N/A

IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A

DOT Proper Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A

DOT Hazard Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A

DOT-Packing group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A

DOT Label(s): N/A

DOT Symbol: N/A

DOT Cargo Aircraft: N/A

DOT Passenger Aircraft: N/A

DOT Bulk: N/A

DOT Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A
 ADR - Hazard identification number: N/A
 ADR Tunnel Restriction Code: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A
 IATA-Cargo Aircraft: N/A
 IATA-Label: N/A
 IATA-Subrisk: N/A
 IATA-Erg: N/A
 IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
 IMDG-Stowage Note: N/A
 IMDG-Subrisk: N/A
 IMDG-Special Provisions: N/A
 IMDG-Page: N/A
 IMDG-Label: N/A
 IMDG-EMS: N/A
 IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Silica Sand	is listed in TSCA	Section 8b
Portland cement	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

no substances listed

CAA - Clean Air Act

CAA listed substances:

no substances listed

CWA - Clean Water Act

CWA listed substances:

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Silica Sand	Listed as carcinogen
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Massachusetts Right to know

Substance(s) listed under Massachusetts Right to know:

Silica Sand

Pennsylvania Right to know**Substance(s) listed under Pennsylvania Right to know:**

Silica Sand
Portland cement

New Jersey Right to know**Substance(s) listed under New Jersey Right to know:**

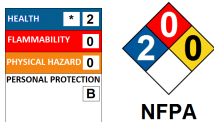
Silica Sand
Portland cement

16. OTHER INFORMATION

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet dated: 4/24/2015 - version 1

Product code: 1849

Additional classification information

HMIS Health: 2 = MODERATE
 HMIS Health - Is health hazard chronic?: Yes
 HMIS Flammability: 0 = Not Combustible
 HMIS Reactivity: 0 = MINIMAL
 HMIS P.P.E.: Safety glasses, gloves
 NFPA Health: 2 = MODERATE
 NFPA Flammability: 0 = Not Combustible
 NFPA Reactivity: 0 = MINIMAL
 NFPA Special Risk: NONE

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 IMDG: International Maritime Code for Dangerous Goods.
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 CLP: Classification, Labeling, Packaging.
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 INCI: International Nomenclature of Cosmetic Ingredients.
 CAS: Chemical Abstracts Service (division of the American Chemical Society).
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

Safety Data Sheet**PRIMER T**

Safety Data Sheet dated: 4/22/2015 - version 1

Date of first edition: 4/22/2015

1. IDENTIFICATION**Product identifier**

Mixture identification:

Trade name: PRIMER T

Recommended use of the chemical and restrictions on use

Recommended use: Acrylic Latex Primer

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION**Classification of the chemical****Classification of the chemical**

0 The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Label elements

The product is not classified as dangerous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substances**

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

None

4. FIRST AID MEASURES**Description of first aid measures**

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

N.A.

Indication of any immediate medical attention and special treatment needed**5. FIRE-FIGHTING MEASURES****Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

7. HANDLING AND STORAGE**Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Storage temperature: N.A.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

No Data Available

Appropriate engineering controls: N.A.

Individual protection measures

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

N.A.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical State: Liquid

Appearance and colour: Viscous white

Odour: like: Acrylate

Odour threshold: N.A.

pH: 7.50

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 100 °C (212 °F)

Flash point: >100 °C (212 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: N.A.
 Solubility in water: Miscible
 Solubility in oil: N.A.
 Partition coefficient (n-octanol/water): N.A.
 Auto-ignition temperature: N.A.
 Decomposition temperature: N.A.
 Viscosity: N.A.
 Explosive properties: N.A.
 Oxidizing properties: N.A.
 Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
 Miscibility: N.A.
 Fat Solubility: N.A.
 Conductivity: N.A.

10. STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects**

Toxicological information of the product:

No Data Available

Substance(s) listed on the IARC Monographs:

None

Substance(s) listed as OSHA Carcinogen(s):

None

Substance(s) listed as NIOSH Carcinogen(s):

None

Substance(s) listed on the NTP report on Carcinogens:

None

12. ECOLOGICAL INFORMATION**Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

No Data Available

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION**UN number**

ADR-UN number: N/A
 DOT-UN Number: N/A
 IATA-Un number: N/A
 IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A
 DOT Proper Shipping Name: N/A
 IATA-Technical name: N/A
 IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A
 DOT Hazard Class: N/A
 IATA-Class: N/A
 IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A
 DOT-Packing group: N/A
 IATA-Packing group: N/A
 IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No
 Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A
 DOT Label(s): N/A
 DOT Symbol: N/A
 DOT Cargo Aircraft: N/A
 DOT Passenger Aircraft: N/A
 DOT Bulk: N/A
 DOT Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A
 ADR - Hazard identification number: N/A
 ADR Tunnel Restriction Code: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A
 IATA-Cargo Aircraft: N/A
 IATA-Label: N/A
 IATA-Subrisk: N/A
 IATA-Erg: N/A
 IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
 IMDG-Stowage Note: N/A
 IMDG-Subrisk: N/A
 IMDG-Special Provisions: N/A
 IMDG-Page: N/A
 IMDG-Label: N/A
 IMDG-EMS: N/A
 IMDG-MFAG: N/A

15. REGULATORY INFORMATION**USA - Federal regulations**

TSCA - Toxic Substances Control Act**TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

no substances listed

SARA - Superfund Amendments and Reauthorization Act**Section 302 - Extremely Hazardous Substances:**

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

no substances listed

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**Substance(s) listed under CERCLA:**

no substances listed

CAA - Clean Air Act**CAA listed substances:**

no substances listed

CWA - Clean Water Act**CWA listed substances:**

no substances listed

USA - State specific regulations**California Proposition 65****Substance(s) listed under California Proposition 65:**

no substances listed

Massachusetts Right to know**Substance(s) listed under Massachusetts Right to know:**

no substances listed

Pennsylvania Right to know**Substance(s) listed under Pennsylvania Right to know:**

no substances listed

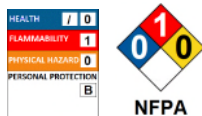
New Jersey Right to know**Substance(s) listed under New Jersey Right to know:**

no substances listed

16. OTHER INFORMATION

Safety Data Sheet dated: 4/22/2015 - version 1

Product code: 2732

Additional classification information

HMIS Health: 0 = MINIMAL

HMIS Health - Is health hazard chronic?: No

HMIS Flammability: 1 = Combustible if heated

HMIS Reactivity: 0 = MINIMAL

HMIS P.P.E.: Safety glasses, gloves

NFPA Health: 0 = MINIMAL
NFPA Flammability: 1 = Combustible if heated
NFPA Reactivity: 0 = MINIMAL
NFPA Special Risk: N.A.

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

Safety Data Sheet

ULTRAPLAN 1 PLUS

Safety Data Sheet dated: 5/19/2015 - version 1

Date of first edition: 5/19/2015

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: ULTRAPLAN 1 PLUS

Recommended use of the chemical and restrictions on use

Recommended use: Cement Based Self Leveling Compound

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION



Classification of the chemical

Classification of the chemical

- Eye Dam. 1 Causes serious eye damage.
- Skin Sens. 1 May cause an allergic skin reaction.
- Carc. 1A May cause cancer if inhaled.
- STOT RE 1 Causes damage to organs through prolonged or repeated exposure if inhaled.

Label elements

Symbols:



Danger

Code Description

- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H350.A May cause cancer if inhaled.
- H372.A Causes damage to organs through prolonged or repeated exposure if inhaled.

Code Description

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260.B Do not breathe dust.
- P264.2 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280.I Wear protective gloves and eye protection.
- P302+P352.A IF ON SKIN: Wash with plenty of water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P310.A Immediately call a POISON CENTER.
- P314 Get medical advice/attention if you feel unwell.
- P321.A Specific treatment (see supplementary instructions on this label)

P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501.A	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substances**

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification
30-40 %	Silica Sand	CAS:14808-60-7	Carc. 1A, H350.A; STOT RE 1, H372.A
1-5 %	Portland cement	CAS:65997-15-1	STOT SE 3, H335; Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Irrit. 2, H315
0.1-1 %	Lithium carbonate	CAS:554-13-2	Acute Tox. 4, H302; Eye Irrit. 2A, H319

4. FIRST AID MEASURES**Description of first aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).**Unsuitable extinguishing media:**

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.
- Provide adequate ventilation.
- Use appropriate respiratory protection.
- See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Wash with plenty of water.

7. HANDLING AND STORAGE**Precautions for safe handling**

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Exercise the greatest care when handling or opening the container.
- Use localized ventilation system.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

- Storage temperature: N.A.
- Incompatible materials:
 - None in particular.
- Instructions as regards storage premises:
 - Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****List of components with OEL value**

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Note
Silica Sand	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
Portland cement	OSHA			15					
	OSHA			5					
	ACGIH			1					A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma;

Appropriate engineering controls: N.A.

Individual protection measures

- Eye protection:
 - Use close fitting safety goggles, don't use eye lens.
- Protection for skin:
 - Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
- Protection for hands:
 - Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
- Respiratory protection:
 - Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

- Physical state: Solid
- Appearance and colour: Powder whitish
- Odour: Cement like
- Odour threshold: N.A.
- pH in Water Dispersion: 12.00
- Melting point / freezing point: N.A.
- Initial boiling point and boiling range: N.A.
- Flash point: Not Applicable
- Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.
 Vapour density: N.A.
 Vapour pressure: N.A.
 Relative density: N.A.
 Solubility in water: DISPERSIBLE
 Solubility in oil: N.A.
 Partition coefficient (n-octanol/water): N.A.
 Auto-ignition temperature: N.A.
 Decomposition temperature: N.A.
 Viscosity: N.A.
 Explosive properties: N.A.
 Oxidizing properties: N.A.
 Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
 Miscibility: N.A.
 Fat Solubility: N.A.
 Conductivity: N.A.

10. STABILITY AND REACTIVITY**Reactivity**

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects****Toxicological information of the mixture:**

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Silica Sand	a) acute toxicity	LD50 Oral Rat = 500mg/kg
Lithium carbonate	a) acute toxicity	LC50 Inhalation Rat > 217mg/l 4h

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

Silica Sand Group 1

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

30360/p5

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. ECOLOGICAL INFORMATION

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
30-40 %	Silica Sand	CAS: 14808-60-7	LC50 a) Aquatic acute toxicity carp> 10000,00000mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Any disposal practice must be in compliance with local, state and federal laws and regulations (contact local or state environmental agency for specific rules). Do not dump into sewers, any body of water or onto the ground.

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION

UN number

ADR-UN number: N/A

DOT - UN Number: N/A

IATA-Un number: N/A

IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A

DOT - Proper Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A

DOT - Hazard Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A

DOT-Packing group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A

DOT - Label(s): N/A

DOT - Symbol: N/A

DOT - Cargo Aircraft: N/A
 DOT - Passenger Aircraft: N/A
 DOT - Bulk: N/A
 DOT - Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A
 ADR - Hazard identification number: N/A
 ADR Tunnel Restriction Code: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A
 IATA-Cargo Aircraft: N/A
 IATA-Label: N/A
 IATA-Subrisk: N/A
 IATA-Erg: N/A
 IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
 IMDG-Stowage Note: N/A
 IMDG-Subrisk: N/A
 IMDG-Special Provisions: N/A
 IMDG-Page: N/A
 IMDG-Label: N/A
 IMDG-EMS: N/A
 IMDG-MFAG: N/A

15. REGULATORY INFORMATION

USA - Federal regulations

TSCA - Toxic Substances Control Act

TSCA inventory:

All the components are listed on the TSCA inventory

TSCA listed substances:

Silica Sand	is listed in TSCA	Section 8b
Portland cement	is listed in TSCA	Section 8b
Lithium carbonate	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act

Section 302 - Extremely Hazardous Substances:

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

Lithium carbonate

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

Substance(s) listed under CERCLA:

no substances listed

CAA - Clean Air Act

CAA listed substances:

no substances listed

CWA - Clean Water Act

CWA listed substances:

no substances listed

USA - State specific regulations

California Proposition 65

Substance(s) listed under California Proposition 65:

Silica Sand

Listed as carcinogen

Lithium carbonate

Listed as reproductive toxicant

Massachusetts Right to know**Substance(s) listed under Massachusetts Right to know:**

Silica Sand

Portland cement

Lithium carbonate

Pennsylvania Right to know**Substance(s) listed under Pennsylvania Right to know:**

Silica Sand

Portland cement

New Jersey Right to know**Substance(s) listed under New Jersey Right to know:**

Silica Sand

Portland cement

Lithium carbonate

16. OTHER INFORMATION

Code	Description
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet dated: 5/19/2015 - version 1

Product code: 1850

Additional classification information**NFPA**

HMIS Health: 2 = Moderate

HMIS Health - Is health hazard chronic?: Yes

HMIS Flammability: 0 = Not Combustible

HMIS Reactivity: 0 = Minimal

HMIS P.P.E.: Safety glasses, gloves, dust respirator

NFPA Health: 2 = Moderate

NFPA Flammability: 0 = Not Combustible

NFPA Reactivity: 0 = Minimal

NFPA Special Risk: NONE

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Safety Data Sheet**ULTRAPLAN EASY**

Safety Data Sheet dated: 4/30/2015 - version 1

Date of first edition: 4/30/2015

1. IDENTIFICATION**Product identifier**

Mixture identification:

Trade name: ULTRAPLAN EASY

Recommended use of the chemical and restrictions on use

Recommended use: Self-Leveler

Restrictions on use: N.A.

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company: MAPEI CORP. (USA and Puerto Rico)

1144 East Newport Center Drive - 33442 - Deerfield Beach - FL - USA

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-613-996-6666

2. HAZARD(S) IDENTIFICATION**Classification of the chemical****Classification of the chemical**

Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1	May cause an allergic skin reaction.
Carc. 1A	May cause cancer if inhaled.
STOT RE 1	Causes damage to organs through prolonged or repeated exposure if inhaled.

Label elements**Symbols:**

Danger

Code	Description
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.
Code	Description
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260.B	Do not breathe dust.
P264.3	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280.I	Wear protective gloves and eye protection.
P302+P352.A	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310.A	Immediately call a POISON CENTER.
P314	Get medical advice/attention if you feel unwell.
P321.A	Specific treatment (see supplementary instructions on this label)

P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501.A	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substances**

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification:

List of components

Quantity	Name	Ident. Numb.	Classification
30-40 %	Silica Sand	CAS:14808-60-7	Carc. 1A, H350.A; STOT RE 1, H372.A
1-5 %	Portland cement	CAS:65997-15-1	STOT SE 3, H335; Eye Dam. 1, H318; Skin Sens. 1, H317; Skin Irrit. 2, H315
0.1-1 %	Lithium carbonate	CAS:554-13-2	Acute Tox. 4, H302; Eye Irrit. 2A, H319

4. FIRST AID MEASURES**Description of first aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation

Eye damages

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. FIRE-FIGHTING MEASURES**Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).**Unsuitable extinguishing media:**

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.
- Provide adequate ventilation.
- Use appropriate respiratory protection.
- See protective measures under point 7 and 8.

Methods and material for containment and cleaning up

- Suitable material for taking up: absorbing material, organic, sand
- Wash with plenty of water.

7. HANDLING AND STORAGE**Precautions for safe handling**

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Exercise the greatest care when handling or opening the container.
- Use localized ventilation system.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

- Storage temperature: N.A.
- Incompatible materials:
 - None in particular.
- Instructions as regards storage premises:
 - Adequately ventilated premises.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****List of components with OEL value**

Component	OEL Type	Country	Ceiling	Long Term mg/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Note
Silica Sand	ACGIH			0,025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis;
Portland cement	OSHA			15					
	OSHA			5					
	ACGIH			1					A4 - Not Classifiable as a Human Carcinogen;pulmonary function;respiratory symptoms;asthma;

Appropriate engineering controls: N.A.

Individual protection measures

- Eye protection:
 - Use close fitting safety goggles, don't use eye lens.
- Protection for skin:
 - Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
- Protection for hands:
 - Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.
- Respiratory protection:
 - Use adequate protective respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

- Physical State: Solid
- Appearance and colour: Powder light grey
- Odour: Cement like
- Odour threshold: N.A.
- pH in Water Dispersion: 12.00
- Melting point / freezing point: N.A.
- Initial boiling point and boiling range: N.A.
- Flash point: Not Applicable
- Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.
 Vapour density: N.A.
 Vapour pressure: N.A.
 Relative density: N.A.
 Solubility in water: DISPERSIBLE
 Solubility in oil: N.A.
 Partition coefficient (n-octanol/water): N.A.
 Auto-ignition temperature: N.A.
 Decomposition temperature: N.A.
 Viscosity: N.A.
 Explosive properties: N.A.
 Oxidizing properties: N.A.
 Solid/gas flammability: N.A.

Other information

Substance Groups relevant properties N.A.
 Miscibility: N.A.
 Fat Solubility: N.A.
 Conductivity: N.A.

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions

Chemical stability

Data not Available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Silica Sand	a) acute toxicity	LD50 Oral Rat = 500mg/kg
Lithium carbonate	a) acute toxicity	LC50 Inhalation Rat > 217mg/l 4h

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

Substance(s) listed on the IARC Monographs:

Silica Sand Group 1

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

12. ECOLOGICAL INFORMATION**Toxicity**

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
30-40 %	Silica Sand	CAS: 14808-60-7	LC50 a) Aquatic acute toxicity carp> 10000,00000mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods**

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

14. TRANSPORT INFORMATION**UN number**

ADR-UN number: N/A

DOT-UN Number: N/A

IATA-Un number: N/A

IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A

DOT Proper Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A

DOT Hazard Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A

DOT-Packing group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No

Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A

DOT Label(s): N/A

DOT Symbol: N/A

DOT Cargo Aircraft: N/A

DOT Passenger Aircraft: N/A

DOT Bulk: N/A

DOT Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR Tunnel Restriction Code: N/A

Air (IATA):

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subrisk: N/A

IATA-Erg: N/A

IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subrisk: N/A

IMDG-Special Provisions: N/A

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: N/A

IMDG-MFAG: N/A

15. REGULATORY INFORMATION**USA - Federal regulations****TSCA - Toxic Substances Control Act****TSCA inventory:**

All the components are listed on the TSCA inventory

TSCA listed substances:

Silica Sand	is listed in TSCA	Section 8b
Portland cement	is listed in TSCA	Section 8b
Lithium carbonate	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act**Section 302 - Extremely Hazardous Substances:**

no substances listed

Section 304 - Hazardous substances:

no substances listed

Section 313 - Toxic chemical list:

Lithium carbonate

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act**Substance(s) listed under CERCLA:**

no substances listed

CAA - Clean Air Act**CAA listed substances:**

no substances listed

CWA - Clean Water Act**CWA listed substances:**

no substances listed

USA - State specific regulations**California Proposition 65****Substance(s) listed under California Proposition 65:**

Silica Sand	Listed as carcinogen
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Massachusetts Right to know**Substance(s) listed under Massachusetts Right to know:**

Silica Sand
 Portland cement
 Lithium carbonate

Pennsylvania Right to know**Substance(s) listed under Pennsylvania Right to know:**

Silica Sand
 Portland cement

New Jersey Right to know**Substance(s) listed under New Jersey Right to know:**

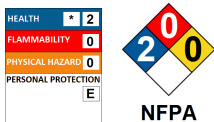
Silica Sand
 Portland cement
 Lithium carbonate

16. OTHER INFORMATION

Code	Description
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H350.A	May cause cancer if inhaled.
H372.A	Causes damage to organs through prolonged or repeated exposure if inhaled.

Safety Data Sheet dated: 4/30/2015 - version 1

Product code: 1988

Additional classification information

HMIS Health: 2 = MODERATE

HMIS Health - Is health hazard chronic?: Yes

HMIS Flammability: 0 = Not Combustible

HMIS Reactivity: 0 = MINIMAL

HMIS P.P.E.: Safety glasses, gloves, dust respirators

NFPA Health: 2 = MODERATE

NFPA Flammability: 0 = Not Combustible

NFPA Reactivity: 0 = MINIMAL

NFPA Special Risk: NONE

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PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

Material Safety Data Sheet

Milliken
Modular Carpet Adhesive 100V

Date: 11/30/2012

Manufactured for:

Milliken
 1440 Campton Road
 Inman, SC 29349
 Telephone: 864.472.9047

24-hour Emergency:

Chemtrec 1-800-424-9300

Product Identification:

Product Class: Aqueous Adhesive
 Product Name: Milliken Modular 100V

Hazardous Ingredients: None known.

*All components of this product appear on the Inventory of Chemical Substances published by the U.S. Environmental Protection Agency (EPA) under the authority of the Toxic Substances Control Act (TSCA). Not listed as a carcinogen as defined by NTP, OSHA, and ACGIH.

Physical Data:

Boiling Point: 212° F
 Vapor Density: Same as water.
 Evaporation Rate: Same as water.
 Appearance & Odor: White, creamy, low odor
 Weight per Gallon: 8.2 lbs.
 Percent Volatile by Weight: 45-50% (as water)
 Solubility in Water: Dispersible
 V.O.C. (Calculated): "zero" grams/liter

Fire and Explosion Hazard Data:

Flammable Limits: Non-flammable
 Flash Point: > 212 deg. F.
 Flammability Classification: OSHA: None
 DOT: None
 Extinguishing Media: CO₂, chemical foam,
 water fog

Special Fire Fighting Features: Wear self-contained breathing gear when in confined area.

Health Hazard Data:

Threshold Limit Value: Not established
 Effects of Overexposure: No known chronic overexposure effects.

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	B

Emergency and First Aid Procedure: Eye contact may cause irritation. In case of eye contact, flush with water for 10-15 minutes. If irritation persists, consult a physician. Skin Contact: prolonged contact may cause slight irritation of the skin. Wash with soap and water. If swallowed, consult a physician. Inhalation: if symptomatic, move to fresh air. Get medical attention if symptoms occur.

Reactivity Data:

Conditions to avoid: Excessive heat or cold.
 Stability: Stable.
 Incompatibility: None known.
 Hazardous Decomposition Products: None known; Normal (CO₂, CO).
 Hazardous Polymerization: Will not occur.

Precautions for Handling and Use:

Ventilation: Local ventilation.
 Protective Gloves: Recommended.
 Eye Protection: Safety glasses.
 Hygienic Practices: Wash with soap and water after exposure.
 Respiratory Protection: Not required with adequate ventilation.
 Other Protective Equipment: None.
 Spills: Cover small spills with inert absorbent, then sweep up and place in waste disposal container. Dispose of in accordance with Federal, State and Local regulations.

Special Precautions/Other Comments:

Precautions to be taken in handling and storing: Store inside at a temperature of 60° - 100° F. Do not allow product to freeze.
 Other precautions: None

Transportation Data:

D.O.T. Hazard Class: Unregulated

Milliken

SANCO, INCORPORATED

Specializing in Non-Ferrous Minerals



MATERIAL SAFETY DATA SHEET

Section I – PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's Name: SANCO, Inc.
 Address: 207 Brookhollow Industrial Blvd.
 Dalton, Georgia 30721
 Telephone Number: 800-536-5725
 Emergency Telephone Number: 800-424-9300 (CHEMTREC)
 Chemical Name/Synonyms: Calcium Carbonate (Ground Limestone, Marble) CaCO₃
 CAS Number: 1317-65-3 (In TSCA Inventory)
 Product Uses: Mineral Pigment and Filler
 Trade Name: **Calcium Carbonate (Ground Limestone, Marble) CaCO₃**

HMIS RATING

Health Hazard	1
Flammability Hazard	0
Reactivity Hazard	0
Max. Personnel Protection	E

NFPA 704M Hazard Classification

Health Hazard	1
Flammability Hazard	0
Reactivity Hazard	0

Section II – INFORMATION ON INGREDIENTS

Limestone is a naturally occurring mineral substance consisting primarily of calcium carbonate and a lesser amount of dolomite together with many other ingredients in small but varying amounts. Compounds in amounts greater than 0.1% are listed below:

<u>Material</u>	<u>CAS #</u>	<u>Wt.% (approx.)</u>
Limestone (Calcium carbonate)	1317-65-3	95-98%
Magnesium Carbonate	546-93-0	1-5%
Silica, quartz*	14808-60-7	0.1-0.75%

Section III – HEALTH HAZARD DATA

<u>Hazardous Material</u>	<u>CAS #</u>	<u>OSHA PEL **</u>	<u>ACGIH TLV**</u>	<u>MSHA**</u>
Limestone (Calcium carbonate)	1317-65-3	15 mg/m ³ Total 5 mg/m ³ Resp.	10 mg/m ³ Total 2 mg/m ³ Resp.	10 mg/m ³ Total
Crystalline Silica, quartz*	14808-60-7	0.1 mg/m ³ Resp.	0.1 mg/m ³ Resp.	5 mg/m ³ Resp.

* Calcium carbonate products may contain crystalline silica at levels between 0.1% and 0.75% and varies naturally.

Note: Calcium carbonate products may contain trace amounts of naturally occurring elements that are regulated in some states. These materials and their typical levels are as follows: Lead at less than 1 ppm and Arsenic at less than 1 ppm.

** Unless otherwise noted, all PEL and TLV values are reported as 8-hour time weighted averages (TWA).

SANCO, INCORPORATED

Specializing in Non-Ferrous Minerals



Section IV – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical State:	Solid Powder	Odor and Appearance:	Odorless white powder
Specific Gravity:	2.71	Melting Point:	Decomposes @ 825C
Boiling Point:	N/A	pH (slurry @ 10% solids)	9-10
Vapor Pressure:	N/A	Solubility in Water (20C):	1.4 mg/ml @ 25C
Vapor Density:	N/A	Evaporation Rate (Butyl Acetate =1):	N/A
% Volatiles by Volume:	N/A		

Section V – HAZARDS IDENTIFICATION AND CAUTIONS

Appearance: White powder

Primary Routes of Entry: Skin contact, skin absorption, eye contact, ingestion. Hazard Classification: None (Historical basis for classification).

Target Organs: Eye, skin, and lungs

Medical Conditions Aggravated by Exposure: Skin contact may aggravate existing dermatitis. Breathing excessive quantities of ground limestone dust may aggravate pre-existing respiratory conditions.

Eye Contact: This product may produce irritation upon contact with the eye. See section VI below.

Skin Contact: Prolonged or repeated exposure may cause skin irritation. Ground limestone is not expected to be absorbed through the skin in harmful amounts or to produce an allergic skin reaction. See section VI below.

Ingestion: No adverse effect is expected. If ingested, seek medical advice. See section VI below.

Inhalation: Inhalation of excessive quantities of ground limestone dust may irritate the respiratory tract. See section VI below.

Subchronic, Chronic: None expected. No applicable information was found concerning any potential health effects resulting from subchronic or chronic exposure to ground limestone.

This product typically contains crystalline silica (quartz) above 0.1% as a naturally occurring impurity. The International Agency for Research on Cancer has concluded that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group I)”. It also noted that carcinogenicity was not detected in all industrial circumstance studies, and may be dependent on external factors affecting its biological activity or distribution of its polymorphs. (See IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68 (1997).) Exposure to respirable silica has been associated with silicosis, scleroderma, and nephrotoxicity. (See Occupational Lung Disorders, Third Edition, Chapter 12 (1994) and the American Journal of Respiratory and Critical Care Medicine, Volume 155, pp 761-765 (1997).)

Section VI – FIRST AID MEASURES

Eye Contact: Follow good industrial hygiene. In case of contact, immediately flush eyes with plenty of water. Seek medical attention if necessary.

Skin Contact: Follow good industrial hygiene. Wash affected skin areas thoroughly with soap and water. Seek medical attention if necessary.

Inhalation: Follow good industrial hygiene. If excessive exposure by inhalation is suspected, remove to fresh air. If necessary, a MSHA/NIOSH or OSHA/NIOSH approved respirator is recommended. Seek medical attention if necessary.

Ingestion: Follow good industrial hygiene. If ingested, do not induce vomiting. If conscious, drink two glasses of water. Seek medical attention if necessary.

SANCO, INCORPORATED

Specializing in Non-Ferrous Minerals



Section VII – FIRE AND EXPLOSION DATA

Explosion Data:	Not Explosive	Flammability:	Not Flammable or Combustible
LEL:	Not Applicable	Flash Point:	Not Applicable
UEL:	Not Applicable	Auto-Ignition:	Not Applicable
Extinguishing Media:	Product Will Not Burn		
NFPA 704M Hazard Classification:	Health: 1 Flammable: 0 Reactivity: 0		

Section VIII – STABILITY AND REACTIVITY DATA

Stability: Stable

Compatible with other Substances: Yes

Hazardous Decomposition/By-Products: No hazardous decomposition or by-products expected.

Conditions Contributing to Hazardous Polymerization: None, inert, and nonreactive.

Incompatibility (Materials to avoid): Will react with acids to produce carbon dioxide.

Section IX – HANDLING AND STORAGE INFORMATION

Store in a cool, dry location.

Keep away from acids.

Spilled materials may cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads.

Minimize dust generation and accumulation.

If excessive dust is generated, provide adequate ventilation and use proper respiratory and personal protective equipment.

Section X – ACCIDENTAL RELEASE MEASURES/DISPOSAL PROCEDURES

Vacuum, pump, or scoop spilled material into container for reclaiming or disposal. Use proper respiratory and personal protective equipment. MSHA/NIOSH or OSHA/NIOSH approved respirators are recommended. Spilled materials may cause slippery conditions when wet. Care should be taken when walking on spills on floors or concrete pads. No neutralizing chemicals are required. Material is inert and non-reactive. Ground limestone is not a CERCLA listed hazardous substance. Limestone is not classified as a toxic pollutant or a hazardous substance under Sections 307 and 311 of the Clean Water Act. Limestone is not classified as a hazardous waste under RCRA Section 3001. Use normal waste disposal procedures that are in compliance with Federal, State, and Local regulations.

Section XI – TRANSPORT INFORMATION

EPA Waste Number:	Not regulated	DOT Classification:	Not regulated
DOT/IMO Classification:	Not regulated	Internal UN:	Not Regulated

Section XII – TOXICOLOGICAL INFORMATION

Ground Limestone: CAS No. 1317-65-3

Primary Route of Exposure: Skin Eye Contact Inhalation Ingestion

Acute Health Hazards: Eye contact may cause mechanical irritation. Calcium carbonate is a severe eye irritant. * Skin contact may aggravate existing dermatitis. Calcium carbonate is a moderate skin irritant. *

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Inhalation from prolonged and continuous exposure to excessive quantities of dust may aggravate existing asthmatic or respiratory conditions.

Calcium carbonate Oral LD (50) in rats is 6450 mg/kg. *

Chronic Health Hazards: **

Carcinogenicity: NTP? No

IARC? No **OSHA?** No

Mutagenicity: None Known
known

Teratogenicity: None known

Reproductive Effects: None

* Dangerous Properties of Industrial Materials, 7th Edition, pp 667, Sax and Lewis 1989

** See section 3 for discussion of crystalline silica.

Section XIII – REGULATORY INFORMATION

SARA Title III Section 302 Extremely Hazardous Substances: This product does not contain extremely hazardous substances subject to the reporting requirements of Section 302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 355.

SARA Title III Section 311 and 312 Health and Physical Hazard Categories per 40 CFR 370.2:

<u>Immediate</u>	<u>Delayed</u>	<u>Fire</u>	<u>Pressure</u>	<u>Reactivity</u>
Yes	Yes	No	No	No

SARA Section 313 Notification: This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

TSCA: Product is listed in initial inventory, Vol. 1, Appendix A, CAS No. 1317-65-3.

The International Agency for Research on Cancer has concluded that “crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group I).” It is also noted that carcinogenicity was not detected in all industrial circumstance studies, and may be dependent on external factors affecting its biological activity or distribution of its polymorphs. (See IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68 (1997). Exposure to respirable silica has also been associated with silicosis, scleroderma, and nephrotoxicity. (See Occupational Lung Disorders, Third Edition, Chapter 12 (1994) and the American Journal of Respiratory and Critical Care Medicine, Volume 155, pp761-765 (1997). Using recommended NIOSH test method, no crystalline silica was detected.

WARNING: This product may also contain extremely small amounts of one or more naturally occurring materials known to the State of California to cause cancer, birth defects, or other reproductive harm.

The information contained in this Material Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information. No warranty (whether for fitness for use or for merchant ability or otherwise) is given. Nothing contained herein should be construed as a recommendation to use this product in conflict with existing patents covering any material or its use. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer’s responsibility to ensure that all activities comply with Federal, State, and Local laws.

Revised Date: February 25, 2005

SAFETY DATA SHEET

30400

Date Revised: 9/5/13

Date Printed: 4/3/15

===== SECTION 1 - IDENTIFICATION =====

MANUFACTURER: SIERRA CORP/TK PRODUCTS EMERGENCY PHONE: 1-800-424-9300
ADDRESS : 11400 WEST 47TH STREET INFORMATION PHONE: (952)938-7223
MINNETONKA, MN 55343 NAME OF PREPARER : Safety Director

PRODUCT NAME: BONDING, LIQUID/AGENT
PRODUCT CODE: TK-225

===== SECTION 2 - HAZARDS IDENTIFICATION =====

HAZARD RISK CLASSIFICATION
SIGNAL WORD:
PICTOGRAM:

HAZARD CLASS HAZARD CATEGORY

HAZARD STATEMENTS:
H303 May be harmful if swallowed

PRECAUTIONARY STATEMENTS:

PREVENTION:

RESPONSE:
P301+P312 If swallowed: Call a Poison Center / doctor if you feel unwell.
P330 Rinse mouth.

STORAGE:

DISPOSAL:

===== SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS =====

COMPONENT	CAS NUMBER	WEIGHT	EXPOSURE LIMITS		
		PERCENT	OSHA PEL	ACGIH TLV	OTHER

*** NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT ***

PRIMARY ROUTES OF EXPOSURE:

Skin contact.

EFFECTS OF ACUTE EXPOSURE:

EYES: Direct contact with eyes may cause irritation.

SKIN: Prolonged or repeated contact may cause irritation. INHALATION: Inhalation of vapor or mist can cause irritation of nose, throat and lungs and lead to headaches and nausea.

INGESTION: Not an anticipated route of exposure. Small amounts are not expected to be harmful.

CHRONIC HEALTH EFFECTS:

No anticipated chronic effects. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No known effects on other illnesses.

===== SECTION 4 - FIRST AID MEASURES =====

EYES: Flush with large amounts of water for 15 minutes, lifting upper and lower eyelids. If irritation persists seek medical attention.

SKIN CONTACT: Wash contaminated area with soap and water. Remove and launder contaminated clothing.

INGESTION: If a large amount is ingested, give water or milk and induce vomiting. Seek medical attention.

INHALATION: Remove victim to fresh air and provide oxygen if breathing is difficult. If breathing has stopped administer artificial respiration. Seek medical attention if condition persists.

===== SECTION 5 - FIRE AND EXPLOSION HAZARD DATA =====

SAFETY DATA SHEET

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Date Revised: 9/5/13

Date Printed: 4/3/15

FLASH POINT: No flash

METHOD USED: n/a

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a

UPPER: n/a

EXTINGUISHING MEDIA:

This material will not burn in its liquid state unless heated above its flash point. Dried films may burn and can be extinguished by water spray, foam, dry chemical or carbon dioxide.

SPECIAL FIREFIGHTING PROCEDURES:

Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment. Isolate danger area, keep unauthorized personnel out.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

There is the possibility of pressure buildup in closed containers when heated. Water spray may be used to cool these containers.

=====**SECTION 6 - ACCIDENTAL RELEASE MEASURES**=====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Do not let uncured spilled or leaking material enter watercourse. May be toxic to aquatic life. Absorb with oil-dri or similar inert material. Sweep or scrape up and containerize. Rinse affected area thoroughly with water. Wear appropriate protective equipment.

=====**SECTION 7 - HANDLING AND STORAGE**=====

HANDLING INFORMATION:

Employees who come in contact with this material must be trained in accordance to 1910.1200 of the Hazard Communicatin Standard. Wear chemical resistant gloves and protective clothing to minimize contact. The use of respiratory protection is advised when spraying because of mist and dust overspray.

STORAGE INFORMATION:

Keep from freezing; material may coagulate. The minimum recommended storage temperature is 34F/1C, the maximum recommended storage temperature is 120F/49C. Keep away from incompatable materials (see section 10). Keep containers tightly closed. It is advised that material be used within 1 year of manufacture, rotate stock.

OTHER PRECAUTIONS:

All empty containers should be disposed of in an environmentally safe manner in accordance with all governmental regulations.

=====**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**=====

RESPIRATORY PROTECTION:

No special requirements under normal use conditions. In confined areas, or ares with poor ventilation, engineering controls should be used to minimize exposure. Use NIOSH/MSHA approved respirator if conditions warrant.

VENTILATION:

General room ventilation is adequate.

PROTECTIVE GLOVES:

Prevent prolonged or repeated contact by wearing chemical resistant gloves and other appropriate protective clothing. Launder contaminated clothing before reuse.

EYE PROTECTION:

Wear safety glasses to reduce eye contact potential. Chemical safety goggles (ANSI Z87.1 or approved equivalent) are appropriate if splashing is likely. Eye washes must be available where eye contact can occur.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

A source of clean water should be available for flushing eyes and skin. Showers should be available if larger spills are possible.

WORK/HYGIENIC PRACTICES:

Efforts should be made to minimize contact and spills. Always wash hands before eating, drinking, or smoking. Clean up spills promptly. Follow OSHA and company guidlines.

=====**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**=====

PHYSICAL STATE: Liquid

COLOR: Various colors

ODOR: Amine or ammonia odor

SOLUBILITY IN WATER: Dilutable

SPECIFIC GRAVITY (H2O=1): 1.06

VAPOR DENSITY: Heavier than air.

BOILING RANGE:

EVAPORATION RATE: Slower than nBuAc

COATING V.O.C.: 5 g/l (0.04 lb/g1)

=====**SECTION 10 - STABILITY AND REACTIVITY DATA**=====

STABILITY:

SAFETY DATA SHEET

Date Revised: 9/5/13

Date Printed: 4/3/15

Stable under normal conditions and handling.

CONDITIONS TO AVOID:

None known

INCOMPATIBILITY (MATERIALS TO AVOID):

None known. Materials which are not compatible with water or ordinary organics will not be compatible with this material.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Combustion may liberate toxic byproducts such as carbon dioxide, and carbon monoxide, various oxides of carbon and nitrogen. Thermal decomposition may liberate acrylic monomers and ammonia.

HAZARDOUS POLYMERIZATION:

Will not occur.

=====**SECTION 11 - TOXICOLOGICAL INFORMATION**=====

SENSITIZATION:

None known.

CARCINOGENICITY:

There is no data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

REPRODUCTIVE TOXICITY:

There is no data available to indicate any components present at greater than 0.1% may present reproductive toxicity.

TERATOGENICITY (BIRTH DEFECTS):

There is no data available to indicate any components present at greater than 0.1% may cause birth defects.

MUTAGENICITY:

There is no data to indicate that any component present at greater than 0.1% will alter DNA.

=====**SECTION 12 - ECOLOGICAL INFORMATION**=====

ENVIRONMENTAL DATA:

Contains ammonia or amines which may be toxic to aquatic life.

=====**SECTION 13 - DISPOSAL CONSIDERATIONS**=====

This product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261, however, state and local regulations may be more restrictive. Coagulate the emulsion by the stepwise addition of ferric chloride and lime. Remove the clear supernatant and flush to a chemical sewer. Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

=====**SECTION 14 - TRANSPORT INFORMATION**=====

SHIPPING NAME:

Not regulated.

=====**SECTION 15 - REGULATORY INFORMATION**=====

All ingredients of this product are listed, or are excluded from listing, on the US Toxic Substances Control Act (TSCA) chemical substance inventory.

This product does not contain a chemical subject to the reporting requirements of SARA Title III, Section 313 (40CFR 372) above de minimis concentrations.

STATE SPECIFIC REQUIREMENTS:

This product does not contain a chemical known to the state of California to cause cancer, birth defects or reproductive harm, subject to the requirements of California Proposition 65.

STATE LISTED COMPONENTS	CAS NUMBER	STATE CODE	.
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=====**SECTION 16 - OTHER INFORMATION**=====

REVISION DATE: 09/05/13

HMIS CODES: H	F	R	P
2	0	0	B

TAYLOR

Safety Data Sheet

LokWorx Resilient Adhesive

Revision date: June 16, 2022

Version: 1

1. Identification

LokWorx Resilient Adhesive

Recommended use of the chemical and restriction on use: interior installation of flooring material over approved subfloors – tile over tile application, luxury vinyl tile and plank, vinyl composition tile, homogenous vinyl sheet goods, and rubber tile and sheet goods.

Details of the supplier of the safety data sheet

Manufactured for: Shaw Industries
P.O. Drawer 2128
Dalton,GA

Company:
W.F.Taylor LLC
800 College Drive
Dalton, GA 30720, USA

Telephone number: (800) 868-4583

Emergency Telephone Number: 1-800-535-5053

Other Means of Identification

Chemical Family: Amide-Ester-Acrylate blend

2. Hazards identification

According to regulation 2012 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

Classification of the Product:

No need for classification according to GHS criteria for this product.

Label Elements

This product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

None known if used according to instructions. Irritation may occur when in contact with eyes and skin.

Emergency Overview

Caution:

May cause skin irritation if not removed after skin contact.

Use with Use with local exhaust ventilation.

Use protective equipment for eyes, skin protection.

3. **Composition / Information on Ingredients**

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

4. **First Aid Measures**

Description of First Aid measures

General Advice:

Upon contact, remove material from skin, eyes, and clothing. If irritation persists, seek medical attention.

If inhaled:

Remove individual to fresh air if needed.

If on Skin:

Wash with mild soap and water.

If in eyes:

Open eyelids and flush with running water for at least 15 minutes.

If Swallowed:

Do not induce vomiting. Seek medical help immediately.

Most Important symptoms and effects, both acute and delayed

Not expected due to non- classification of the product.

Indication of any immediate medical attention and special treatment neededNote to physician

Treatment: Symptomatic treatment

5. Fire-Fighting Measures**Extinguishing Media**

None needed in wet state. Product is water based.

Dry material will burn. Use Water spray, foam, dry powder when needed.

Special hazards arising from the substance or mixture

Material is a mixture of organic compounds. Compounds of carbon may arise during burning.

Advice for fire-fighters:

Wear self-contained breathing apparatus and turn out gear.

Further Information:

Dispose debris and contaminated clothing in accordance with regulations.

6. Accidental release measuresFurther accidental release measures:

Slip hazard when spilled.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with skin and eyes.

Environmental Precautions

Do not release spilled material into natural waters.

Methods and material for containment and cleaning up

Remove material using absorbents. Scrape off excess and place in closed DOT approved containers for disposal.

7. Handling and Storage Precautions for Safe Handling

Do not puncture. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Keep from freezing. Avoid extreme temperatures.

8. Exposure Control/ Personal Protection

Advice on system design: Maintain proper ventilation.

Personal protective equipment:

Respiratory protection: NIOSH respirator if needed. Use local exhaust ventilation. Do not use closed air-circulating system.

Skin protection: chemical resistant gloves, apron, coveralls, and boots to prevent unnecessary contact.

Eye protection: safety glasses, goggles, or face shield

General safety and hygiene safety measures:

Wash hands and face after use. Launder contaminated clothing before re-use. Always use protective equipment to avoid direct contact.

9. Physical and Chemical Properties

Form: medium viscosity liquid

Odor: mild

Odor threshold: no data

Color: Light Gray

pH value: 9.0 – 9.5

Melting point: not applicable

Boiling point: similar to water

Flash point: not applicable

Flammability: none flammable

Lower Explosion Limit: low

Upper Explosion Limit: low

Vapor Pressure: low

Density: not determined

Relative density: not determined

Vapor density: low

Partition Coefficient n-octanol /water (log Pow): no data

Self- ignition temperature: not applicable

Viscosity, dynamic: 37,500 – 75,000 cps

Solubility in water: limited
Miscibility in water: miscible
Evaporation rate: same as water
Other information:
VOC Content: = < 25 g/L

9. Stability and Reactivity

Reactivity: Stable **Chemical stability:** Stable
Possibility of hazardous reactions: None, product is stable.
Conditions to avoid: Extreme temperatures.
Incompatible materials: None known
Hazardous decomposition products: None known.

11. Toxicological Information

No data available

Primary routes of exposure: respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity / Effects

Acute toxicity: May cause irritation upon contact.

Chronic Toxicity Effects

Repeated dose toxicity: no data available
Genetic toxicity: no data available
Carcinogenicity: not carcinogenic Reproductive toxicity: no data available Teratogenicity: no data available Experiences in humans: No data available

Other Information

12. Ecological Information

No data available

13. Disposal Considerations

Abide by all State, federal and local regulations

14. Transport Information

Proper Shipping name: Not applicable Proper
Hazard Class: Not hazardous Hazard Code:
None hazardous
Bill of Lading Description: **Adhesives, NOI**

15. Regulatory Information:**Federal Regulations****Registration status:**

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: None

EPA SARA Title III Section 312: None

NFPA Hazard Codes:

Health: 1 Fire: 0 Reactivity: 0 Special:

HMIS rating:

Health: 1 Flammability: 0 Physical hazard: 0

16. Other Information

SDS prepared by: W.F. Taylor LLC SDS group

SDS prepared on: June 16, 2022

Shaw Industries believes the data set forth herein are accurate as of the date hereof. Shaw Industries makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.

TAYLOR

Safety Data Sheet

Shaw 5000/5001 Pressure Sensitive Bio Renewable Adhesive

Revision date: May 22, 2015

Version: 1

1. Identification

Shaw 5000/5001 Pressure Sensitive Biorenewable Adhesive

Recommended use of the chemical and restriction on use: interior installation of flooring material over approved subfloors – vinyl backed carpet, vinyl backed broadloom carpet and modular tiles.

Details of the supplier of the safety data sheet

Manufactured for: Shaw Industries

P.O. Drawer 2128

Dalton, GA

Company:

W.F.Taylor LLC

11545 Pacific Avenue

Fontana, CA 92337, USA

Telephone number: (800) 397-4583

Emergency Telephone Number: 1-800-535-5053

Other Means of Identification

Chemical Family: Acrylate latex and resin blend

2. Hazards identification

According to regulation 2012 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

Classification of the Product:

No need for classification according to GHS criteria for this product.

Label Elements

This product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

None known if used according to instructions. Irritation may occur when in contact with eyes and skin.

Emergency Overview

Caution:

May cause skin irritation if not removed after skin contact.

Use with Use with local exhaust ventilation.

Use protective equipment for eyes, skin protection.

3. Composition / Information on Ingredients

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

<u>CAS number</u>	<u>Content</u>	<u>Chemical Name</u>
Trade Secret	1-10	Tackifier resin
Trade Secret	40-60	Acrylic latex
7732-18-5	15-30	Water

4. First Aid Measures

Description of First Aid measures

General Advice:

Upon contact, remove material from skin, eyes, and clothing. If irritation persists, seek medical attention.

If inhaled:

Remove individual to fresh air if needed.

If on Skin:

Wash with mild soap and water.

If in eyes:

Open eyelids and flush with running water for at least 15 minutes.

If Swallowed:

Do not induce vomiting. Seek medical help immediately.

Most Important symptoms and effects, both acute and delayed

Not expected due to non- classification of the product.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment

5. Fire-Fighting Measures

Extinguishing Media

None needed in wet state. Product is water based.

Dry material will burn. Use Water spray, foam, dry powder when needed.

Special hazards arising from the substance or mixture

Material is a mixture of organic compounds. Compounds of carbon may arise during burning.

Advice for fire-fighters

Wear self-contained breathing apparatus and turn out gear.

Further Information:

Dispose debris and contaminated clothing in accordance with regulations.

6. Accidental release measures

Further accidental release measures:

Slip hazard when spilled.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with skin and eyes.

Environmental Precautions

Do not release spilled material into natural waters.

Methods and material for containment and cleaning up

Remove material using absorbents. Scrape off excess and place in closed DOT approved containers for disposal.

7. Handling and Storage

Precautions for Safe Handling

Do not puncture. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Keep from freezing. Avoid extreme temperatures.

8. Exposure Control/ Personal Protection

Advice on system design: Maintain proper ventilation.

Personal protective equipment:

Respiratory protection: NIOSH respirator if needed. Use local exhaust ventilation. Do not use closed air-circulating system.

Skin protection: chemical resistant gloves, apron, coveralls, and boots to prevent unnecessary contact.

Eye protection: safety glasses, goggles, or face shield

General safety and hygiene safety measures:

Wash hands and face after use. Launder contaminated clothing before re-use. Always use protective equipment to avoid direct contact.

9. Physical and Chemical Properties

Form: medium viscosity liquid

Odor: mild

Odor threshold: no data

Color: off white to cream

pH value: 8.5 – 9.0

Melting point: not applicable

Boiling point: similar to water

Flash point: not applicable

Flammability: none flammable

Lower Explosion Limit: low

Upper Explosion Limit: low

Vapor Pressure: low

Density: 8.0 – 9.0 lbs. per gallon

Relative density: 0.96– 1.08 grams / cm³

Vapor density: low

Partition Coefficient n-octanol /water (log Pow): no data

Self- ignition temperature: not applicable

Viscosity, dynamic: 45,000 55,000 cps

Solubility in water: limited

Miscibility in water: miscible

Evaporation rate: same as water

Other information:

10. Stability and Reactivity

Reactivity: Stable

Chemical stability: Stable

Possibility of hazardous reactions: None, product is stable.

Conditions to avoid: Extreme temperatures.

Incompatible materials: None known

Hazardous decomposition products: None known.

11. Toxicological Information

No data available

Primary routes of exposure: respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity / Effects

Acute toxicity: May cause irritation upon contact.

Chronic Toxicity Effects

Repeated dose toxicity: no data available

Genetic toxicity: no data available

Carcinogenicity: not carcinogenic

Reproductive toxicity: no data available

Teratogenicity: no data available

Experiences in humans

Other Information

12. Ecological Information

No data available

13. Disposal Considerations

Abide by all State, federal and local regulations

14. Transport Information

Proper Shipping name: Not applicable

Proper Hazard Class: Not hazardous

Hazard Code: None hazardous

Bill of Lading Description: **Adhesives, NOI**

15. Regulatory Information:

Federal Regulations

Registration status:

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: None

EPA SARA Title III Section 312: None

State regulations:

CA Prop 65:

Warning: This product may contain a chemical (s) known to the state of California to cause cancer and birth defects or other reproductive harm.

NFPA Hazard Codes:

Health: 1 Fire: 0 Reactivity: 0 Special:

HMIS rating:

Health: 1 Flammability: 0 Physical hazard: 0

16. Other Information

SDS prepared by: W.F. Taylor LLC SDS group

SDS prepared on: May, 22, 2015

Shaw Industries believes the data set forth herein are accurate as of the date hereof. Shaw Industries makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.

SAFETY DATA SHEET

In accordance with OSHA 29 CFR 1910.1200

TARKETT 959HM ADHESIVE
Revision Number 1

Revision Date: 23-Jun-2021
Supersedes Date: Not applicable

1. Identification

1.1. Product identifier

Product Name TARKETT 959HM ADHESIVE

Other means of identification

Other information Not applicable

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Adhesive
Restrictions on use No information available

1.3. Details of the supplier of the safety data sheet

Responsible Party

Tarkett North America
30000 Aurora Road
Solon, Ohio 44139 USA
Phone: +1 (800) 899-8916 (Domestic Toll Free)
Phone: +1 (440) 543-8916 (Local)
www.tar

1.4. Emergency telephone number

Emergency Telephone Chemtrec (Transport/Environmental): 1-800-424-9300
1-703-527-3887 (Outside U.S.)
Rocky Mountain Poison Center: 1-866-767-5089

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200.

Hazards not otherwise classified (HNOC)

Not applicable

2.2. Label elements

EMERGENCY OVERVIEW

Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200.

Appearance No information available **Physical state** Liquid **Odor** No information available

2.3. Other Information

US - EN

SAFETY DATA SHEET

TARKETT 959HM ADHESIVE
Revision Number 1

Revision Date: 23-Jun-2021
Supersedes Date: Not applicable

3. Composition/information on ingredients

3.1. Substances

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
Glass, oxide, chemicals	65997-17-3	10 - 30

**The exact percentage (concentration) of composition has been withheld as a trade secret*

4. First-aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
Hazardous combustion products	Carbon dioxide (CO ₂). Silicon dioxide.

SAFETY DATA SHEET

TARKETT 959HM ADHESIVE
Revision Number 1

Revision Date: 23-Jun-2021
Supersedes Date: Not applicable

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

5.3. Advice for firefighters

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Stop leak if you can do it without risk. Ensure adequate ventilation. Wash thoroughly after handling.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Use personal protective equipment as required. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep from freezing.

7.3 References to other sections

Reference to other sections Section 10: STABILITY AND REACTIVITY
Section 13: DISPOSAL CONSIDERATIONS

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Revision Date: 23-Jun-2021
Supersedes Date: Not applicable

8. Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Glass, oxide, chemicals 65997-17-3	TWA: 1 fiber/cm ³ respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m ³ inhalable particulate matter	-	-

Chemical name	Argentina	Brazil	Chile	Colombia
Glass, oxide, chemicals 65997-17-3	TWA: 1 fiber/cm ³ TWA: 5 mg/m ³	TWA: 1 fiber/cm ³	-	TWA: 1fiber/cm ³ TWA: 5mg/m ³

Chemical name	Costa Rica	Peru	Uruguay	Venezuela
Glass, oxide, chemicals 65997-17-3	TWA: 1fiber/cm ³ TWA: 5mg/m ³	-	1 fiber/cm ³ TWA (respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination, listed under Synthetic vitreous fibers); 5 mg/m ³ TWA (inhalable particulate matter, listed under Synthetic vitreous fibers)	-

8.2. Exposure controls

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

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Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear suitable gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations	Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	No information available
Odor	No information available
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	Not applicable for liquids	
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	30000 - 50000 mPa s	Spindle 6 @ 10 rpm @ 25 °C

9.2. Other information

Explosive properties	No information available
Oxidizing properties	No information available
Solvent content (%)	No information available
Solid content (%)	60-63

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Supersedes Date: Not applicable

Softening Point	No information available
Molecular weight	No information available
VOC Content (%)	0 g/L / 0 %
Density	8.5 - 9.5 LB/GAL
Bulk density	No information available

10. Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Chemical stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Keep from freezing.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied

11. Toxicological information

11.1. Information on toxicological effects

Inhalation Based on available data, the classification criteria are not met.

Eye contact Based on available data, the classification criteria are not met.

Skin contact Based on available data, the classification criteria are not met.

Ingestion Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
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Revision Date: 23-Jun-2021
Supersedes Date: Not applicable

Glass, oxide, chemicals 65997-17-3	>2000 mg/Kg Rat	-	LC50 > 0.691 mg/l (Rattus) 4-Hr
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitization	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Glass, oxide, chemicals 65997-17-3	-	Group 3	-	-

Legend

Reproductive toxicity	Based on available data, the classification criteria are not met.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

12.1. Toxicity

Ecotoxicity . No information available.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

12.4. Mobility in soil

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

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13. Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
Contaminated packaging	Dispose of in accordance with federal, state and local regulations.

14. Transport information

DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated

15. Regulatory information

International Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Listed - The components of this product are either listed or exempt from listing on inventory.

Not Listed - One or more components of this product are not listed on inventory.

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

This product does not contain Lead, Cadmium, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-Ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) above the regulated limit mentioned in this regulation

SVHC: Substances of Very High Concern for Authorization:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

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Revision Number 1

Revision Date: 23-Jun-2021
Supersedes Date: Not applicable

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Revision date 23-Jun-2021

Revision note No information available.

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End of Safety Data Sheet



Safety Data Sheet

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Document Group:	16-5359-1	Version Number:	6.00
Issue Date:	03/19/15	Supersedes Date:	11/10/14

Product identifier
8403 Kit, Part A&B

ID Number(s):

98-0798-5374-7, 98-0798-5375-4

Recommended use

8400 Series Floor Tile Installation

Supplier's details

MANUFACTURER: 3M
DIVISION: Electronics Materials Solutions Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA
Telephone: 1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

16-5254-4, 16-5255-1

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8403 Kit, Part A&B 03/19/15

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Document Group:	16-5254-4	Version Number:	6.00
Issue Date:	03/19/15	Supersedes Date:	10/22/14

SECTION 1: Identification

1.1. Product identifier

8403 CONDUCTIVE FLOOR TILE ADHESIVE, PART A

Product Identification Numbers

8403, PART A, LH-B100-0003-3

1.2. Recommended use and restrictions on use

Recommended use

Mix with 8403 Conductive Floor Tile Adhesive, Part B for installation of 3M 8400 Series ESD Floor Tiles, Floor tile adhesive

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Electronics Materials Solutions Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Flammable Liquid: Category 3.

Serious Eye Damage/Irritation: Category 2B.

Skin Sensitizer: Category 1.

2.2. Label elements

Signal word

Warning

Symbols

Flame | Exclamation mark |

Pictograms

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**Hazard Statements**

Flammable liquid and vapor.

Causes eye irritation.

May cause an allergic skin reaction.

Precautionary Statements**Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wear protective gloves and eye/face protection.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified

None.

94% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Epoxy Resin	25068-38-6	70 - 80
Epoxy Resin	28064-14-4	9 - 17
Ethyl Alcohol	64-17-5	< 10
Fumed Silica	67762-90-7	< 3
PHENOL-FORMALDEHYDE POLYMER	9003-35-4	< 1

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

Not applicable.

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent

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material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Ethyl Alcohol	64-17-5	OSHA	TWA:1900 mg/m3(1000 ppm)	
Ethyl Alcohol	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
Fumed Silica	67762-90-7	CMRG	CEIL:5 mg/m3	
SILICA, AMORPHOUS	67762-90-7	OSHA	TWA concentration:0.8 mg/m3;TWA:20 millions of particles/cu. ft.	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls**8.2.1. Engineering controls**

Use with appropriate local exhaust ventilation. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)**Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Specific Physical Form:	Paste
Odor, Color, Grade:	Translucent thin paste
Odor threshold	<i>No Data Available</i>
pH	<i>No Data Available</i>
Melting point	<i>No Data Available</i>
Boiling Point	172 °F
Flash Point	Approximately 93 °F [<i>Test Method: Closed Cup</i>]
Evaporation rate	>=1 [<i>Ref Std: BUOAC=1</i>]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Vapor Pressure	<i>No Data Available</i>
Vapor Density	<i>No Data Available</i>
Density	9.58 lb/gal
Specific Gravity	1.15 [<i>Ref Std: WATER=1</i>]
Solubility in Water	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Average particle size	<i>No Data Available</i>
Bulk density	<i>No Data Available</i>
Hazardous Air Pollutants	<i>No Data Available</i>
Molecular weight	<i>No Data Available</i>
Volatile Organic Compounds	<i>No Data Available</i>
Percent volatile	Approximately 10 %
Softening point	<i>No Data Available</i>

VOC Less H2O & Exempt Solvents

*No Data Available***SECTION 10: Stability and reactivity****10.1. Reactivity**

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Sparks and/or flames

Heat

10.5. Incompatible materials

Not determined

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Aldehydes	Not Specified
Formaldehyde	Not Specified
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects**Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

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Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Carcinogenicity:

Ingredient	CAS No.	Class Description	Regulation
Generic: ALCOHOLIC BEVERAGES	64-17-5	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Generic: ALCOHOLIC BEVERAGES	64-17-5	Known human carcinogen	National Toxicology Program Carcinogens

Additional Information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Epoxy Resin	Dermal	Rat	LD50 > 1,600 mg/kg
Epoxy Resin	Ingestion	Rat	LD50 > 1,000 mg/kg
Epoxy Resin	Dermal	Rabbit	LD50 > 6,000 mg/kg
Epoxy Resin	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.7 mg/l
Epoxy Resin	Ingestion	Rat	LD50 > 4,000 mg/kg
Ethyl Alcohol	Dermal	Rabbit	LD50 > 15,800 mg/kg
Ethyl Alcohol	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
Ethyl Alcohol	Ingestion	Rat	LD50 17,800 mg/kg
Fumed Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Fumed Silica	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Fumed Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
PHENOL-FORMALDEHYDE POLYMER	Dermal	Rat	LD50 > 2,000 mg/kg
PHENOL-FORMALDEHYDE POLYMER	Ingestion	Rat	LD50 > 2,900 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Epoxy Resin	Rabbit	Mild irritant
Epoxy Resin	Rabbit	Minimal irritation
Ethyl Alcohol	Rabbit	No significant irritation
Fumed Silica	Rabbit	No significant irritation
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
Epoxy Resin	Rabbit	Moderate irritant

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Epoxy Resin	Rabbit	Mild irritant
Ethyl Alcohol	Rabbit	Moderate irritant
Fumed Silica	Rabbit	No significant irritation
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Moderate irritant

Skin Sensitization

Name	Species	Value
Epoxy Resin	Human and animal	Sensitizing
Epoxy Resin	Human and animal	Sensitizing
Ethyl Alcohol	Human	Some positive data exist, but the data are not sufficient for classification
Fumed Silica	Human and animal	Not sensitizing
PHENOL-FORMALDEHYDE POLYMER	Human and animal	Sensitizing

Respiratory Sensitization

Name	Species	Value
Epoxy Resin	Human	Some positive data exist, but the data are not sufficient for classification
PHENOL-FORMALDEHYDE POLYMER	Human	Some positive data exist, but the data are not sufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Epoxy Resin	In vivo	Not mutagenic
Epoxy Resin	In Vitro	Some positive data exist, but the data are not sufficient for classification
Epoxy Resin	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification
Fumed Silica	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Epoxy Resin	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Fumed Silica	Not Specified	Mouse	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Epoxy Resin	Ingestion	Not toxic to female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Epoxy Resin	Ingestion	Not toxic to male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation

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Epoxy Resin	Dermal	Not toxic to development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Epoxy Resin	Ingestion	Not toxic to development	Rat	NOAEL 750 mg/kg/day	2 generation
Ethyl Alcohol	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
Ethyl Alcohol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	prematuring & during gestation
Fumed Silica	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Fumed Silica	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Fumed Silica	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
Ethyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
Ethyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
Ethyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	
PHENOL-FORMALDEHYDE POLYMER	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Epoxy Resin	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
Epoxy Resin	Dermal	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Epoxy Resin	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
Ethyl Alcohol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
Ethyl Alcohol	Inhalation	hematopoietic system immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
Ethyl Alcohol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
Ethyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days
Fumed Silica	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational

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		silicosis			available	exposure
PHENOL-FORMALDEHYDE POLYMER	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. Combustion products will include halogen acid (HCl/HF/HBr). Facility must be capable of handling halogenated materials. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

15.2. State Regulations

Contact 3M for more information.

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California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
ALCOHOLIC BEVERAGES	None	Carcinogen
ALCOHOLIC BEVERAGES	None	Developmental Toxin

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause cancer.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information**NFPA Hazard Classification**

Health: 2 **Flammability:** 3 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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Safety Data Sheet

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Issue Date:	03/19/15	Supersedes Date:	08/13/14

SECTION 1: Identification

1.1. Product identifier

8403 CONDUCTIVE FLOOR TILE ADHESIVE, PART B

Product Identification Numbers

8403, PART B, LH-B100-0004-3

1.2. Recommended use and restrictions on use

Recommended use

Mix with 8403 Conductive Floor Tile Adhesive, Part A, for Installation of 3M 8400 Series ESD Floor Tiles

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	Electronics Materials Solutions Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification

Flammable Liquid: Category 3.
Acute Toxicity (oral): Category 4.
Serious Eye Damage/Irritation: Category 1.
Skin Corrosion/Irritation: Category 1B.
Skin Sensitizer: Category 1A.
Reproductive Toxicity: Category 2.
Carcinogenicity: Category 2.
Specific Target Organ Toxicity (single exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Flame | Corrosion | Exclamation mark | Health Hazard |

Pictograms**Hazard Statements**

Flammable liquid and vapor.

Harmful if swallowed.

Causes serious eye damage.

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

Suspected of damaging fertility or the unborn child.

Suspected of causing cancer.

Causes damage to organs:
sensory organs |

Precautionary Statements**Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves, protective clothing, and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Response:

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see Notes to Physician on this label).

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Store locked up.

8403 CONDUCTIVE FLOOR TILE ADHESIVE, PART B 03/19/15**Disposal:**

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

Notes to Physician:

This product contains methanol. If there is a reasonable suspicion of methanol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

2.3. Hazards not otherwise classified

May cause chemical gastrointestinal burns. Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

29% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Polyaminoamide	68410-23-1	50 - 60
TRIETHYLENETETRAMINE	112-24-3	5 - 15
Carbon Black	1333-86-4	15 - 25
Methyl Alcohol	67-56-1	< 10
Ethyl Alcohol	64-17-5	< 10

SECTION 4: First aid measures**4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

Skin Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye Contact:

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If Swallowed:

Rinse mouth. Do not induce vomiting. Get immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

This product contains methanol. If there is a reasonable suspicion of methanol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

SECTION 5: Fire-fighting measures**5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidizing agents. Store away from areas where product may come into contact with food or pharmaceuticals.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

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Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
TRIETHYLENETETRAMINE	112-24-3	AIHA	TWA:6 mg/m ³ (1 ppm)	Skin Notation
Carbon Black	1333-86-4	CMRG	TWA:0.5 mg/m ³	
Carbon Black	1333-86-4	OSHA	TWA:3.5 mg/m ³	
Carbon Black	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m ³	A3: Confirmed animal carcin.
Ethyl Alcohol	64-17-5	ACGIH	STEL:1000 ppm	A3: Confirmed animal carcin.
Ethyl Alcohol	64-17-5	OSHA	TWA:1900 mg/m ³ (1000 ppm)	
Methyl Alcohol	67-56-1	ACGIH	TWA:200 ppm;STEL:250 ppm	Skin Notation
Methyl Alcohol	67-56-1	OSHA	TWA:260 mg/m ³ (200 ppm)	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Polymer laminate

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapor respirators may have short service life.

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Liquid
Specific Physical Form:	Paste
Odor, Color, Grade:	Black, characteristic odor
Odor threshold	<i>No Data Available</i>
pH	<i>No Data Available</i>
Melting point	<i>No Data Available</i>
Boiling Point	Approximately > 148 °F
Flash Point	102 °F [<i>Test Method</i> : Closed Cup]
Evaporation rate	>=1 [<i>Ref Std</i> : BUOAC=1]
Flammability (solid, gas)	Not Applicable
Flammable Limits(LEL)	3.84 % volume
Flammable Limits(UEL)	28.7 % volume
Vapor Pressure	42 mmHg
Vapor Density	>=1 [<i>Ref Std</i> : AIR=1]
Density	8.25 lb/gal
Specific Gravity	Approximately 0.99 [<i>Ref Std</i> : WATER=1]
Solubility in Water	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Viscosity	<i>No Data Available</i>
Average particle size	<i>No Data Available</i>
Bulk density	<i>No Data Available</i>
Hazardous Air Pollutants	<i>No Data Available</i>
Molecular weight	<i>No Data Available</i>
Percent volatile	Approximately 25 %
Softening point	<i>No Data Available</i>

SECTION 10: Stability and reactivity

10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Not determined

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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Aldehydes	Not Specified
Formaldehyde	Not Specified
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause additional health effects (see below).

Skin Contact:

May be harmful in contact with skin.

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Vapors released during curing may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

Harmful if swallowed. Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

May cause blindness.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

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<u>Ingredient</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
Carbon Black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

<u>Name</u>	<u>Route</u>	<u>Species</u>	<u>Value</u>
Overall product	Dermal		No data available; calculated ATE 2,000 - 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE 300 - 2,000 mg/kg
Polyaminoamide	Ingestion	Rat	LD50 > 8,000 mg/kg
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg
TRIETHYLENETETRAMINE	Dermal	Rabbit	LD50 550 mg/kg
TRIETHYLENETETRAMINE	Ingestion	Rat	LD50 2,500 mg/kg
Methyl Alcohol	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
Methyl Alcohol	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
Methyl Alcohol	Ingestion		LD50 estimated to be 50 - 300 mg/kg
Ethyl Alcohol	Dermal	Rabbit	LD50 > 15,800 mg/kg
Ethyl Alcohol	Inhalation-Vapor (4 hours)	Rat	LC50 124.7 mg/l
Ethyl Alcohol	Ingestion	Rat	LD50 17,800 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

<u>Name</u>	<u>Species</u>	<u>Value</u>
Carbon Black	Rabbit	No significant irritation
TRIETHYLENETETRAMINE	Rabbit	Corrosive
Methyl Alcohol	Rabbit	Mild irritant
Ethyl Alcohol	Rabbit	No significant irritation

Serious Eye Damage/Irritation

<u>Name</u>	<u>Species</u>	<u>Value</u>
Carbon Black	Rabbit	No significant irritation
TRIETHYLENETETRAMINE	Rabbit	Corrosive
Methyl Alcohol	Rabbit	Moderate irritant
Ethyl Alcohol	Rabbit	Moderate irritant

Skin Sensitization

<u>Name</u>	<u>Species</u>	<u>Value</u>
TRIETHYLENETETRAMINE	Guinea pig	Sensitizing
Methyl Alcohol	Guinea pig	Not sensitizing
Ethyl Alcohol	Human	Some positive data exist, but the data are not

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sufficient for classification

Respiratory Sensitization

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Name	Route	Value
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Methyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification
Ethyl Alcohol	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic
Methyl Alcohol	Inhalation	Multiple animal species	Not carcinogenic
Ethyl Alcohol	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Methyl Alcohol	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,600 mg/kg/day	21 days
Methyl Alcohol	Ingestion	Toxic to development	Mouse	LOAEL 4,000 mg/kg/day	during organogenesis
Methyl Alcohol	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesis
Ethyl Alcohol	Inhalation	Not toxic to development	Rat	NOAEL 38 mg/l	during gestation
Ethyl Alcohol	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 5,200 mg/kg/day	prematuring & during gestation

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Methyl Alcohol	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not available	occupational exposure
Methyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
Methyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 hours

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Methyl Alcohol	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
Methyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
Ethyl Alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	LOAEL 2.6 mg/l	30 minutes
Ethyl Alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	LOAEL 9.4 mg/l	not available
Ethyl Alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Multiple animal species	NOAEL not available	
Ethyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Carbon Black	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Methyl Alcohol	Inhalation	liver	All data are negative	Rat	NOAEL 6.55 mg/l	4 weeks
Methyl Alcohol	Inhalation	respiratory system	All data are negative	Rat	NOAEL 13.1 mg/l	6 weeks
Methyl Alcohol	Ingestion	liver nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 2,500 mg/kg/day	90 days
Ethyl Alcohol	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rabbit	LOAEL 124 mg/l	365 days
Ethyl Alcohol	Inhalation	hematopoietic system immune system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/l	14 days
Ethyl Alcohol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 8,000 mg/kg/day	4 months
Ethyl Alcohol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL 3,000 mg/kg/day	7 days

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information**Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations**13.1. Disposal methods**

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Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable)

SECTION 14: Transport Information

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
Methyl Alcohol	67-56-1	< 10

15.2. State Regulations

Contact 3M for more information.

15.3. Chemical Inventories

The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information.

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

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15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: Other information**NFPA Hazard Classification**

Health: 3 Flammability: 3 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 3 Flammability: 3 Physical Hazard: 1 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document Group:	16-5255-1	Version Number:	6.00
Issue Date:	03/19/15	Supersedes Date:	08/13/14

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Safety Data Sheet

Bentley Healthbond 2399 Transitional Pressure Sensitive Adhesive

Revision date: March 26, 2018

Version: 4

1. Identification

Bentley Healthbond 2399 Versatile Transitional Pressure Sensitive Adhesive

Recommended use of the chemical and restriction on use: interior installation of flooring material over approved subfloors – carpet tiles, LVP/LVT, fiberglass and vinyl sheet.

Details of the supplier of the safety data sheet

Company: W.F.Taylor LLC
800 College Drive
Dalton, GA 30720 USA

Telephone number: (800) 868-4583

Emergency Telephone Number: 1-800-535-5053

Other Means of Identification

Chemical Family: Amide-Ester-Acrylate blend

2. Hazards identification

According to regulation 2012 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

Classification of the Product:

No need for classification according to GHS criteria for this product.

Label Elements

This product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

None known if used according to instructions. Irritation may occur when in contact with eyes and skin.

Emergency Overview

Caution:

May cause skin irritation if not removed after skin contact.

Use with Use with local exhaust ventilation.

Use protective equipment for eyes, skin protection.

3. Composition / Information on Ingredients

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

<u>CAS number</u>	<u>Content</u>	<u>Chemical Name</u>
Trade Secret	1-10	Hydrocarbon resin
Trade Secret	1-10	Tall Oil Rosin
Trade Secret	40-60	Acrylic latex
7732-18-5	20-30	Water

4. First Aid Measures

Description of First Aid measures

General Advice:

Upon contact, remove material from skin, eyes, and clothing. If irritation persists, seek medical attention.

If inhaled:

Remove individual to fresh air if needed.

If on Skin:

Wash with mild soap and water.

If in eyes:

Open eyelids and flush with running water for at least 15 minutes.

If Swallowed:

Do not induce vomiting. Seek medical help immediately.

Most Important symptoms and effects, both acute and delayed

Not expected due to non- classification of the product.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment

5. Fire-Fighting Measures

Extinguishing Media

None needed in wet state. Product is water based.

Dry material will burn. Use Water spray, foam, dry powder when needed.

Special hazards arising from the substance or mixture

Material is a mixture of organic compounds. Compounds of carbon may arise during burning.
Advice for fire-fighters

Wear self-contained breathing apparatus and turn out gear.

Further Information:

Dispose debris and contaminated clothing in accordance with regulations.

6. Accidental release measures

Further accidental release measures:

Slip hazard when spilled.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with skin and eyes.

Environmental Precautions

Do not release spilled material into natural waters.

Methods and material for containment and cleaning up

Remove material using absorbents. Scrape off excess and place in closed DOT approved containers for disposal.

7. Handling and Storage

Precautions for Safe Handling

Do not puncture. Keep out of the reach of children.

Conditions for safe storage, including any incompatibilities

Keep from freezing. Avoid extreme temperatures.

8. Exposure Control/ Personal Protection

Advice on system design: Maintain proper ventilation.

Personal protective equipment:

Respiratory protection: NIOSH respirator if needed. Use local exhaust ventilation. Do not use closed air-circulating system.

Skin protection: chemical resistant gloves, apron, coveralls, and boots to prevent unnecessary contact.

Eye protection: safety glasses, goggles, or face shield

General safety and hygiene safety measures:

Wash hands and face after use. Launder contaminated clothing before re-use. Always use protective equipment to avoid direct contact.

9. Physical and Chemical Properties

Form: medium viscosity liquid

Odor: mild

Odor threshold: no data

Color: Blue

pH value: 8.5 – 9.5

Melting point: not applicable

Boiling point: similar to water

Flash point: not applicable

Flammability: none flammable

Lower Explosion Limit: low

Upper Explosion Limit: low

Vapor Pressure: low

Density: 8.16 – 8.66 lbs. per gallon

Relative density: 0.98 – 1.04 grams / cm³

Vapor density: low

Partition Coefficient n-octanol /water (log Pow): no data

Self- ignition temperature: not applicable

Solubility in water: limited

Miscibility in water: miscible

Evaporation rate: same as water

Other information:

V.O.C., g/l less water, less exempt solvents: ≤ 36

10. Stability and Reactivity

Reactivity: Stable

Chemical stability: Stable

Possibility of hazardous reactions: None, product is stable.

Conditions to avoid: Extreme temperatures.

Incompatible materials: None known

Hazardous decomposition products: None known.

11. Toxicological Information

No data available

Primary routes of exposure: respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity / Effects

Acute toxicity: May cause irritation upon contact.

Chronic Toxicity Effects

Repeated dose toxicity: no data available
Genetic toxicity: no data available
Carcinogenicity: not carcinogenic
Reproductive toxicity: no data available
Teratogenicity: no data available
Experiences in humans

Other Information

12. Ecological Information

No data available

13. Disposal Considerations

Abide by all State, federal and local regulations

14. Transport Information

Proper Shipping name: Not applicable
Proper Hazard Class: Not hazardous
Hazard Code: None hazardous
Bill of Lading Description: **Adhesives, NOI**

15. Regulatory Information:

Federal Regulations

Registration status:

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: None

EPA SARA Title III Section 312: None

NFPA Hazard Codes:

Health: 1 Fire: 0 Reactivity: 0 Special:

HMIS rating:

Health: 1 Flammability: 0 Physical hazard: 0

16. Other Information

SDS prepared by: WFTaylor LLC SDS Group

SDS Revised on: March 26, 2018

W.F. Taylor LLC believes the data set forth herein are accurate as of the date hereof. Taylor makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.

Version	Revision Date:	MSDS Number:	Date of last issue: 05/28/2015
2.0	06/10/2015	F000000899	Date of first issue: 05/20/2015

SECTION 1. IDENTIFICATION

Product name : GOLDSTIX

Product code : F000000899

Manufacturer or supplier's details

Company name of supplier : XL Brands, LLC

Address : 198 Nexus Drive
Dalton GA 30721

Telephone : (800) 367-4583

Telefax : (800) 547-0098

Emergency telephone number : (CHEMTREC): (800) 424-9300 (CHEMTREC International):
(703) 527-3887 Industrial Health/Spill Emergency: (706) 277-
1300 Danny Welch (ehs@trcc.com)

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**Hazardous components**

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air in case of accidental inhalation of vapours.
Oxygen or artificial respiration if needed.
Call a physician or poison control centre immediately.

In case of skin contact : Wash off immediately with soap and plenty of water while
removing all contaminated clothes and shoes.
If skin irritation persists, call a physician.

In case of eye contact : In case of eye contact, remove contact lens and rinse imme-

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diately with plenty of water, also under the eyelids, for at least 15 minutes.
Keep eye wide open while rinsing.
Seek medical advice.

If swallowed : Do not induce vomiting without medical advice.
If conscious, drink plenty of water.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Foam
Carbon dioxide (CO₂)
ABC powder
Water mist

Specific hazards during fire-fighting : Burning produces irritant fumes.
Exposure to decomposition products may be a hazard to health.
Cool closed containers exposed to fire with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Hazardous decomposition products due to incomplete combustion

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
Exposure to decomposition products may be a hazard to health.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Material can create slippery conditions.
Use non-slip safety shoes in areas where spills or leaks can occur.

Environmental precautions : Prevent further leakage or spillage if safe to do so.
Do not let product enter drains.

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Do not allow contact with soil, surface or ground water.
Do not allow uncontrolled discharge of product into the environment.

Methods and materials for containment and cleaning up : Dam up.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Sweep up and shovel.
Pick up and transfer to properly labelled containers.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : The product is not flammable. No special protective measures against fire required.

Advice on safe handling : Wear personal protective equipment.
Handle with care.
Take care to avoid waste and spillage when weighing, loading and mixing the product.

Conditions for safe storage : No smoking.
Keep in properly labelled containers.
Observe label precautions.
Keep containers tightly closed in a dry, cool and well-ventilated place.

Materials to avoid : Do not freeze.
Keep away from food and drink.
Keep away from tobacco products.

Recommended storage temperature : 4 - 43 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Handle only in a place equipped with local exhaust (or other appropriate exhaust).
Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

GOLDSTIX**XLBrands®**

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Use NIOSH approved respiratory protection.

Hand protection
Material

: Impervious gloves

Eye protection

: Safety glasses with side-shields
Tightly fitting safety goggles
Face-shield

Skin and body protection

: Chemical resistant apron
Footwear protecting against chemicals
Skin should be washed after contact.
Change working clothes after each workshift.

Protective measures

: Avoid contact with skin.
When using do not eat, drink or smoke.
Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

: Do not smoke.
Keep away from food and drink.
Avoid contact with skin, eyes and clothing.
Change working clothes after each workshift.
Remove and wash contaminated clothing and gloves, including the inside, before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: paste
Colour	: tan
Odour	: mild, characteristic
pH	: 8.0 - 9.0
Melting point/range	: No data available
Boiling point/boiling range	: 212 °F
Flash point	: > 212 °F
Vapour pressure	: No data available
Density	: 1,130 - 1,150 kg/m ³
Solubility(ies)	

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Water solubility	:	insoluble
Solubility in other solvents	:	Not applicable
Partition coefficient: n-octanol/water	:	Not applicable
Explosive properties	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
Conditions to avoid	:	Protect from frost.
Incompatible materials	:	Oxidizing agents Strong acids and strong bases
Hazardous decomposition products	:	Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Remarks: This information is not available.

Skin corrosion/irritation**Product:**

Remarks: This information is not available.

Serious eye damage/eye irritation**Product:**

Remarks: This information is not available.

Respiratory or skin sensitisation**Product:**

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Remarks: This information is not available.

Carcinogenicity

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish :
Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates :
Remarks: No data available

Toxicity to algae :
Remarks: No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not dispose of waste into sewer.
Dispose of in accordance with local regulations.
Can be landfilled or incinerated, when in compliance with local regulations.

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Contaminated packaging : Clean container with water.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

49 CFR

Not regulated as a dangerous good

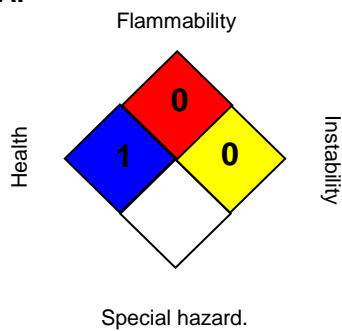
SECTION 15. REGULATORY INFORMATION

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

TSCA All components of this product appear on the Inventory of Chemical Substances published by the U.S. Environmental Protection Agency (EPA) under the authority of the Toxic Substances Control Act (TSCA).

GOLDSTIX**XLBrands®**Version
2.0Revision Date:
06/10/2015MSDS Number:
F000000899Date of last issue: 05/28/2015
Date of first issue: 05/20/2015**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 06/10/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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