Safety Data Sheet

BOSS® 360 Sealant Siliconized Latex

Section 1. Identification

Product Identifier	BOSS® 360 Sealant Siliconized Latex
Synonyms	36001; 02735WH10; C39018WH
Manufacturer Stock Numbers	02735WH10; C39018WH
Recommended use	Refer to Technical Information
Uses advised against	Refer to Technical Information

Manufacturer Contact

Address

Soudal Accumetric
350 Ring Road
Elizabethtown, KY, 42701
USA

Phone	Emergency Phone	Fax
(270) 769-3385	(800) 424-9300 CHEMTREC	(270) 765-2412

Section 2. Hazards Identification

Classification	N/A
Signal Word	
Pictogram	
Hazard Statements	N/A
Precautionary Statements	
Response	N/A
Prevention	N/A
Storage	N/A
Disposal	N/A

General	If medical advice is needed, have product container or label at hand Keep out of reach of children Read label before use
Ingredients of unknown toxicity	0%
Hazards not Otherwise Classified	
GHS Classification	Not a hazardous substance or mixture.
GHS Label Element	Not a hazardous substance or mixture.
Other hazards	None known

Section 3. Ingredients

CAS	Ingredient Name	Weight %
27138-31-4	Dipropylene glycol dibenzoate	1% - 5%
13463-67-7	Titanium Dioxide	1% - 5%
64742-46-7	Distillates (petroleum), hydrotreated middle	1% - 5%
7632-00-0	Sodium Nitrite	0.1% - Max

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

Section 4. First-Aid Measures

Ingestion	No first aid should be needed.
Skin Contact	Wash affected area with soap and water.
Inhalation	Remove to fresh air. If symptoms persist, obtain appropriate medical attention.
Eye Contact	Immediately flush with large amounts of water. If irritation occurs, seek medical attention.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media	Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog
Unsuitable Extinguishing Media	None known
Special Fire Fighting Procedures	Non-flammable (aqueous emulsion). After water evaporates, remaining material will burn. Breathing apparatus required when fighting fires in enclosed areas.
Unusual Fire or Explosion Hazards	Product will not burn, but may splatter if temperature exceeds boiling point of water. Dried solids can burn, giving off oxides of carbon.

Section 6. Accidental Release Measures

Steps to be taken in case of spill or release	Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. For small spills, wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled material, even in small quantities, may present a slip hazard. Final cleaning may require the use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Section 7. Handling and Storage

Storage	Store in a cool dry place. Protect from freezing and excessive heat.
Handling	Avoid breathing vapors in top of shipping container. Keep container closed. Use with adequate ventilation. Avoid contact with skin and clothing. Wash throughly after handling.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Dipropylene glycol dibenzoate	N/A	N/A	N/A
Titanium Dioxide	TWA: 10 mg/m3	TWA: 15 mg/m3 total dust	N/A
Distillates (petroleum), hydrotreated middle	5 mg/m3	5 mg/m3	10 mg/m3
Sodium Nitrite	N/A	N/A	N/A

Personal Protective Equipment	Goggles, Gloves
Ventilation	Local exhaust ventilation is recommended to maintain vapor level below TLV.
Respiratory protection	No respiratory protection should be needed with good local ventilation.
Eye Protection	Safety goggles or glasses with side shields are recommended.
Skin Protection	Impervious gloves are suggested.

Section 9. Physical and Chemical Properties

Physical State	Paste

Color	Refer to product label
Odor	Slight
Odor Threshold	N/A
Solubility	Dilutable in wet stage
Partition coefficient Water/n-octanol	N/A
VOC%	9.8 g/L
Viscosity	750,000 cPs
Specific Gravity	1.66
Density lbs/Gal	13.8
Pounds per Cubic Foot	103.63042
Flash Point	Not determined
FP Method	N/A
pH	7.85
Melting Point	Not applicable
Boiling Point	100C
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	Slower than n-Butyl acetate
Flammability	N/A
Decomposition Temperature	N/A
Auto-ignition Temperature	N/A
Vapor Pressure	Not determined
Vapor Density	Lighter then air

Note	The above information is not intended for use in preparing product specifications. Contact Soudal Accumetric before writing specifications.

Section 10. Stability and Reactivity

Hazardous polymerization	Will not occur
Chemical Stability	Stable
Conditions to avoid	None known
Materials to Avoid / Incompatibility	None known

Section 11. Toxicological Information

Special Hazard Information on Components	No known applicable information.
Component Toxicology Information	No known applicable information.

Section 12. Ecological Information

Fate and Effects in Waste Water Treatment Plants	Complete information is not yet available.
Environmental Effects	Complete information is not yet available.
Environmental Fate and Distribution	Complete information is not yet available.

Section 13. Disposal

Waste Disposal Method	We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes. This product is not known to be regulated under RCRA regulations. Disposal of unused portions of this product and process waste containing this product should be done only after a careful evaluation and in compliance with all federal, local and state laws.

Section 14. Transport Information

UN Number	N/A
UN Proper Shipping Name	Not regulated
DOT Classification	Not regulated
Packing Group	Not regulated
Air Shipment (IATA)	Not subject to IATA regulations.
Ocean Shipment (IMDG)	Not subject to IMDG code.

Section 15. Regulatory Information

	The contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.
TSCA Status	All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.
SARA Title III Section 302 Extremely Hazardous Substances	None

SARA Titre III Section 304 CERCLA Substances dangereuses	None
SARA Title III Section 313 Toxic Chemicals	None present or none present in regulated quantities.
California Proposition 65	This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm: None known

Section 16. Other Information

Revision Date	12/12/2017
Disclaimer	The data contained herein is based upon information that Soudal Accumetric believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements or suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

MSDS Document

Product BOSS® 362 Siliconized Acrylic Latex

1. Chemical Product and Company Identification

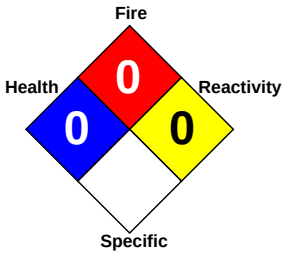
Trade Name of this Product BOSS® 362 Siliconized Acrylic Latex

Synonyms: 02071WH10, 02071CL10, 02071AM10, 03205WH10, C39023CL, C39010AM, C39010WH, C39023WH, C39010CHR, C39010IV, C39010OAK, C39010SAGE, C39010SMP, C39010SR, C39010WN

MSDS ID BOSS362c

Manufacturer
Accumetric, LLC
350 Ring Road
Elizabethtown, KY 42701

Phone Number
(270) 769-3385
Emergency Phone
CHEMTREC (800) 424-9300
Revision Date 1/8/2009



Health:	0
Fire:	0
Reactivity:	0
Specific	

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Calcium Carbonate	471-34-1	35% - 65%	10 mg/m3	5 mg/m3	
Vinyl acetate/acrylic copolymer	Proprietary	10% - 20%			
Phthalate plasticizer	Proprietary	5% - 10%			
Acrylic resin	Proprietary	4% - 10%			
Distillates (petroleum), hydrotreated middle	64742-46-7	< 5.0 %	5 mg/m3	5 mg/m3	10 mg/m3
Ethylene Glycol	107-21-1	< 1.0 %	50 mg/m3	40 ppm	40 ppm

3. Hazard Identification

Health Hazards
The principle volatile component is water. Minor volatile components from the emulsion

may cause headache and nausea. Prolonged and repeated skin contact can cause irritation. Treatment of overexposure should be directed at the control of symptoms and clinical condition.

Eye Contact
Direct contact may cause moderate irritation.

Skin Contact
No significant effects expected from a single short-term exposure.

Inhalation
Trace component and residual monomer may cause headache, nausea, and irritation of the nose, throat, and lungs in poorly ventilated areas.

Ingestion
No significant effects expected from a single short term exposure.

Existing Conditions Aggravated by Exposure
No known applicable information.

Symptoms of Overexposure
No known applicable information.

Note
The above listed potential effects are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for detailed toxicology information.

4. First Aid Information

Eye Contact
Immediately flush with large amounts of water. If irritation occurs, seek medical attention.

Skin Contact
Wash affected area with soap and water.

Inhalation
Remove to fresh air. If symptoms persist, obtain appropriate medical attention.

Ingestion
No first aid should be needed.

5. Fire Fighting Measures

Flash Point Not determined

Extinguishing Media
Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog

Flammability: TDGR Class
Sensitivity to impact

Sensitivity to static discharge

Special Fire Fighting Procedures
Non-flammable (aqueous emulsion). After water evaporates, remaining material will burn. Breathing apparatus required when fighting fires in enclosed areas.

Unusual Fire or Explosion Hazards
Product will not burn, but may splatter if temperature exceeds boiling point of water. Dried solids can burn, giving off oxides of carbon.

6. Accidental Release Measures

Steps to be taken in case of spill or release
Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. For small spills, wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled material, even in small quantities, may present a slip hazard. Final cleaning may require the use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.

Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

7. Handling and Storage

Handling
Avoid breathing vapors in top of shipping container. Keep container closed. Use with adequate ventilation. Avoid contact with skin and clothing. Wash throughly after handling.

Storage
Store in a cool dry place. Protect from freezing and excessive heat.

8. Exposure Controls and Personal Protection

Engineering Controls
Local Ventilation: Recommended
General Ventilation: Recommended

Eye Protection
Chemical goggles if liquid contact is likely, or safety glasses with side shields.

Skin Protection
Wash at mealtimes and end of shift. Contaminated clothing and shoes should be removed

as soon as practical and throughly cleaned before reuse. Chemical protective gloves are recommended.

Suitable Gloves:
Silver Shield® 4H®

Respiratory Protection
Use respiratory protection unless adequate exhaust ventilation is provided or exposure assessment demonstrates that exposures are within exposure guidelines. Industrial Hygiene Personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator:
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits as determined by air sampling or are unknown, appropriate respiratory protection should be worn. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Ventilation
Local exhaust ventilation is recommended to maintain vapor level below TLV.

Note
These precautions are for room temperature handling. Use at elevated temperatures or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com).

9. Physical and Chemical Properties

Physical State	Paste
Specific Gravity	1.64
Color/Appearance	Various
Odor	Slight
pH	7.85
Boiling/Cond. Point	100C
Melting/Freezing Point	0C
Solubility	Dilutable in wet stage
Evaporation Rate	Slower than n-Butyl acetate
VOC %	0.67% (by weight) 11 g/L
Percent Volatile	18%
Vapor Density	Lighter than air
Vapor Pressure	Not determined

Note
The above information is not intended for use in preparing product specifications. Contact Accumetric LLC before writing specifications.

10. Stability and Reactivity

Chemical Stability
Stable

Hazardous Polymerization
Will not occur

Conditions to Avoid
None known

Materials to Avoid / Incompatibility
None known

11. Toxicological Information

Special Hazard Information on Components
No known applicable information.

Component Toxicology Information
No known applicable information.

12. Ecological Information

Environmental Effects
Complete information is not yet available.

Environmental Fate and Distribution
Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants
Complete information is not yet available.

13. Disposal Considerations

Waste Disposal Method
We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

This product is not known to be regulated under RCRA regulations. Disposal of unused portions of this product and process waste containing this product should be done only after a careful evaluation and in compliance with all federal, local and state laws.

14. Transportation Information

DOT Road Shipment Information
Not subject to DOT.

Ocean Shipment (IMDG)
Not subject to IMDG code.

Air Shipment (IATA)
Not subject to IATA regulations.

15. Regulatory Information

The contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status
All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

SARA Title III Section 302 Extremely Hazardous Substances
None

SARA Title III Section 304 CERCLA Hazardous Substances
None

SARA Title III Section 312 Hazard Class
Acute: Yes
Chronic: No
Fire: No
Pressure: No
Reactive: No

SARA Title III Section 313 Toxic Chemicals
None present or none present in regulated quantities.

California Proposition 65
This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm:
None known

16. Other Information

Disclaimer
The data contained herein is based upon information that Accumetric LLC believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements to suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

Material Safety Data Sheet
Duct Seal

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:	Duct Seal	
Other/generic names:	Uniseal 202, 502, 502B DS-110, 130, 510, 530	
Product use:	Sealant for electrical conduit/fixtures.	
Manufacturer:	GB Electrical Inc. 6101 N. Baker Road Milwaukee, WI 53209 1-800-822-9220	In case of emergency, contact 3E Company, 800-360-3220 24 hrs, 7 days/week

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Soft grey solid. Not considered hazardous in normal use or if spilled.

POTENTIAL HEALTH HAZARDS

Skin:	Prolonged contact may cause mild irritation.
Eyes:	Prolonged contact may cause mild irritation.
Inhalation:	No harmful effects anticipated.
Ingestion:	Not considered toxic. Ingestion of large quantities may be harmful.
Delayed effects:	None anticipated.

Ingredients found on one of the OSHA designated carcinogen lists are listed below.

Ingredient Name	NTP Status	IARC Status	OSHA List
No ingredients listed in this section.			

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Weight %
No hazardous ingredients as per the OSHA Hazard Communication Standard or the Canadian WHMIS regulations.	-----	-----

Trace impurities and additional material names not listed above may also appear in Section 15 toward the end of the MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

4. FIRST AID MEASURES

Skin:	Wash with soap and water.
Eyes:	Rinse eyes with running water. If irritation develops, get medical attention.
Inhalation:	Remove to fresh air if discomfort is experienced.
Ingestion:	If swallowed, seek medical attention.
Advice to physician:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point & Method	> 450 °F (> 232 °C)
Autoignition Temperature:	Not determined
Explosive Limits	Not determined

Flame Propagation Rate (solids):	Not determined
OSHA Flammability Class:	Not applicable

Extinguishing Media:	Foam, dry chemical, carbon dioxide, water mist or spray.
Unusual Fire And Explosion Hazards:	Vapors generated by fire or decomposition may be hazardous.
Special Fire Fighting Precautions/Instructions:	Wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE: Wear proper protective clothing. Pick up spilled product with shovel and place into container for reuse (if uncontaminated) or for disposal.

7. HANDLING AND STORAGE

Normal Handling:	Avoid unnecessary prolonged contact with skin and clothing. Wash well after handling.
Storage Recommendations:	Store in a cool, dry place. Keep containers closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general ventilation and local exhaust to maintain concentrations of vapors below allowable exposure values.

PERSONAL PROTECTIVE EQUIPMENT

Skin Protection:	Not normally required.
Eye Protection:	Safety glasses recommended as a general practice.
Respiratory Protection:	Not normally required. Use of product in or near high temperature operations (e.g. welding) may require the use of respiratory protection.
Additional Recommendations:	None.

EXPOSURE GUIDELINES

Ingredient Name	ACGIH TLV	OSHA PEL	Other *
No ingredients listed in this section.			

* = NIOSH REL
** = Workplace Environmental Exposure Level (AIHA).
*** = Biological Exposure Index (ACGIH).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Grey solid
Physical State:	Solid
Molecular Weight:	Mixture
Chemical Formula:	Mixture
Odor:	Negligible
Specific Gravity (water = 1.0):	~2
Solubility In Water (wt. %):	Negligible
Melting Point:	Not determined
Flash Point	> 450 °F (> 232 °C)

10. STABILITY AND REACTIVITY

Normally Stable? (Conditions To Avoid):	Normally stable.
Incompatibilities:	Strong acids and oxidizing agents may cause reaction or ignite product.
Hazardous Decomposition Products:	Combustion products can be irritating and/or toxic. These may include carbon monoxide and carbon dioxide and organic compounds including aromatic and aliphatic hydrocarbons
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

This product is not considered hazardous.

12. ECOLOGICAL INFORMATION

Specific data on mixture not available. May be harmful if discharged into natural waterways.

13. DISPOSAL CONSIDERATIONS

RCRA

Is the unused product a RCRA hazardous waste if discarded?	No
If yes, the RCRA ID number is:	

OTHER DISPOSAL CONSIDERATIONS: Observe all Federal, State, and Local Environmental regulations.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

14. TRANSPORT INFORMATION

US DOT Proper Shipping Name:	Not regulated
US DOT Hazard Class & Packing Group:	Not regulated
US DOT ID Number:	Not regulated

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA)

TSCA Inventory Status:	All ingredients are listed on the TSCA chemical inventory.
Other TSCA Issues:	None

SARA TITLE III/CERCLA

Reportable Quantities (RQs) and/or Threshold Planning Quantities (TPQs) exist for the following ingredients.

Ingredient Name	SARA/CERCLA RQ (lb)	SARA EHS TPQ (lb)
No ingredients listed in this section.		

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS: None

SARA 313 TOXIC CHEMICALS:

The following ingredients are listed as SARA 313 "Toxic Chemicals" and potential subject to annual SARA 313 reporting. Weight percents are found in Section 3.

Ingredient Name	Comment
No ingredients listed in this section.	

STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

Ingredient Name	Weight %	Comment
No ingredients listed in this section.		

OTHER REGULATORY INFORMATION:

WHMIS Classification (Canada):	As shipped: Not a controlled product. This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
Foreign Inventory Status:	All ingredients listed on Canadian DSL

16. OTHER INFORMATION

Current Issue Date:	March 13, 2009		
Previous Issue Date:	February 2006		
Changes To MSDS From Previous Issue Date Are Due To The Following:	File Review		
HMIS (III) Ratings	Health: 0	Flammability: 0	Physical Hazard: 0
NFPA 704 Ratings	Health: 0	Flammability: 0	Instability: 0
MSDS prepared by Gardner Bender technical department.			

Flexible Products
2050 North Broadway
Joliet, Illinois 60435

Tel (815)774-6500 Fax (815) 774-6546
For Emergency: Chemtrec (800)424-9300

MATERIAL SAFETY DATA SHEET

1 PRODUCT Great Stuff Acrylic Latex Foam Sealant

2 COMPOSITION

CHEMICAL	CAS#	CONCENTRATION	REGULATED_
Polymer solids	Mixture_	40-70%	No
Surface Active Agent	Mixture_	7-13%	No
Liquified Petroleum Gas	Mixture_	3-7%	Yes
Water	7732-18-5	15-40%	No

(1-see regulatory section for more information)

(2-different raw material sources)

Appearance: Off white, sticky material with a mild odor.

3 HAZARDS IDENTIFICATION

HMIS: H F R PPE
1 4 0

CAUTION! EXTREMELY FLAMMABLE.
Contents under pressure.

Irritancy of Product: Irritating to eyes, skin, mucous membranes.

Routes of Entry: Eye and skin contact, inhalation, ingestion.

4 FIRST AID MEASURES

EYE flush with clean, low pressure water for 15 minutes holding eyelids open.

SKIN remove contaminated clothing; wash skin with soap and water.

INHALATION remove to fresh air.

INGESTION in case of excessive ingestion, give large amount of liquids. Do not induce vomiting.
In all cases, seek additional medical attention.

5 FIRE-FIGHTING MEASURES

Flash Point: -156°F (-104°C) (estimated)

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water

Special Protective Equipment: Self Contained Breathing Apparatus

Hazardous Decomposition Products: During combustion, Carbon Monoxide and Carbon Dioxide, Nitrogen Oxides, and Ammonia are given off.

6 ACCIDENTAL RELEASE MEASURES

Provide adequate ventilation.
Wear suitable personal protective clothing and equipment.
Scrape up the bulk of the spill and put into a suitable waste receptacle. Avoid spreading the spill to other surfaces.

7 HANDLING AND STORAGE

Protect containers from physical abuse.
Avoid direct sunlight
Storage temperature: 32°F-90°F (0°-32°C)
DO NOT incinerate aerosol can.

Prepared by: A. Jarocha
File Name: CSM-018a

Reference No. Latex
Date of Issue: 4/99 - Draft

Flexible Products
2050 North Broadway
Joliet, Illinois 60435

Tel (815)774-6500 Fax (815)774-6546
For Emergency: Chemtrec (800)424-9300

MATERIAL SAFETY DATA SHEET

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE wear safety goggles.
SKIN wear protective clothing.
RESPIRATORY use only in well-ventilated areas.

9 PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pres. (21°C/70°F):	Not determined
Specific Gravity:	Not determined
VOC Content (g/L):	Not determined

10 STABILITY AND REACTIVITY

Stable under normal handling and use. Avoid open flames, alcohols, strong bases acids and ammonia.

11 TOXICOLOGICAL INFORMATION

No toxicological testing has been performed on this product.

12 ECOLOGICAL INFORMATION

Unknown

13 DISPOSAL INFORMATION

Do not puncture or incinerate.
Relieve all pressure prior to disposal.
Dispose of according to federal and state regulations.

14 TRANSPORTATION INFORMATION

Consumer Commodity ORM-D

15 REGULATORY INFORMATION

EXPOSURE LIMITS	TWA (8 hour), mg/m	SHORT TERM(10 mins), mg/m
Propane	1800(1000ppm)	

REGULATED CHEMICAL	APPLICABLE REGULATIONS
Propane	MA, NJ, PA
Isobutane	MA, NJ, PA

16 OTHER INFORMATION

None

Prepared by: A. Jarocha
File Name: CSM-018a

Reference No. Latex
Date of Issue: 4/99 - Draft

Common Name: LOCTITE 222MS LOW STRENGTH THREADLOCKER KNOWN AS LOCTITE 222MS THREADLOCK, 22205

Manufacturer: HENKEL

SDS Revision Date: 7/8/2015

SDS Format: GHS-US

Grainger Item Number(s): 2VZC3

Manufacturer Model Number(s):

SDS Table of Contents

Click the desired link below to jump directly to that section in the SDS.

SAFETY DATA SHEET

HENKEL

REVISION NUMBER: 006.1

ISSUE DATE: 07/08/2015

1. PRODUCT AND COMPANY IDENTIFICATION

top

PRODUCT NAME:

LOCTITE 222MS LOW STRENGTH THREADLOCKER KNOWN AS LOCTITE(R) 222MS THREADLOCKER

IDH NUMBER: 231483

PRODUCT TYPE: ANAEROBIC SEALANT

ITEM NUMBER: 22205

RESTRICTION OF USE: NONE IDENTIFIED

REGION: UNITED STATES

COMPANY ADDRESS:
HENKEL CORPORATION
ONE HENKEL WAY
ROCKY HILL, CONNECTICUT 06067

CONTACT INFORMATION:

TELEPHONE: (860) 571-5100

MEDICAL EMERGENCY PHONE:
POISON CONTROL CENTER: 1-877-671-4608 (TOLL FREE) OR 1-303-592-1711

TRANSPORT EMERGENCY PHONE:
CHEMTREC: 1-800-424-9300 (TOLL FREE) OR 1-703-527-3887

INTERNET: WWW.HENKELNA.COM

2. HAZARDS IDENTIFICATION

top

EMERGENCY OVERVIEW:

WARNING:
CAUSES SKIN AND EYE IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2B
SKIN SENSITIZATION	1

PICTOGRAM(S): EXCLAMATION MARK

PRECAUTIONARY STATEMENTS:

PREVENTION:

AVOID BREATHING VAPORS, MIST, OR SPRAY. WASH THOROUGHLY AFTER HANDLING.
CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE.
WEAR PROTECTIVE GLOVES.

RESPONSE:

IF ON SKIN: WASH WITH PLENTY OF WATER.

IF IN EYES:
RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.

IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ATTENTION.

IF EYE IRRITATION PERSISTS:
GET MEDICAL ATTENTION. TAKE OFF CONTAMINATED CLOTHING.

STORAGE: NOT PRESCRIBED

DISPOSAL:
DISPOSE OF CONTENTS AND/OR CONTAINER ACCORDING TO FEDERAL, STATE/PROVINCIAL AND LOCAL GOVERNMENTAL REGULATIONS.

CLASSIFICATION COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200) AND IS CONSISTENT WITH THE PROVISIONS OF THE UNITED NATIONS GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELING OF CHEMICALS (GHS).

SEE SECTION 11 FOR ADDITIONAL TOXICOLOGICAL INFORMATION.

3. COMPOSITION / INFORMATION ON INGREDIENTS

top

HAZARDOUS COMPONENT(S)	CAS NUMBER	PERCENTAGE*
POLYGLYCOL DIMETHACRYLATE	PROPRIETARY	30 - 60
POLYGLYCOL OLEATE	PROPRIETARY	30 - 60
SACCHARIN	81-07-2	1 - 5
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	112945-52-5	1 - 5
CUMENE HYDROPEROXIDE	80-15-9	1 - 5
PROPANE-1,2-DIOL	57-55-6	1 - 5
TITANIUM DIOXIDE	13463-67-7	0.1 - 1
CUMENE	98-82-8	0.1 - 1

* EXACT PERCENTAGE IS A TRADE SECRET. CONCENTRATION RANGE IS PROVIDED TO ASSIST USERS IN PROVIDING APPROPRIATE PROTECTIONS.

4. FIRST AID MEASURES

INHALATION:
MOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION.

SKIN CONTACT:
IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER (USING SOAP, IF AVAILABLE). REMOVE CONTAMINATED CLOTHING AND FOOTWEAR. WASH CLOTHING BEFORE REUSE. GET MEDICAL ATTENTION.

EYE CONTACT:
RINSE IMMEDIATELY WITH PLENTY OF WATER, ALSO UNDER THE EYELIDS, FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION.

INGESTION:
DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

SYMPTOMS: SEE SECTION 11.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:
WATER SPRAY (FOG), FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

SPECIAL FIREFIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING, SUCH AS TURN-OUT GEAR. IN CASE OF FIRE, KEEP CONTAINERS COOL WITH WATER SPRAY.

UNUSUAL FIRE OR EXPLOSION HAZARDS:
UNCONTROLLED POLYMERIZATION MAY OCCUR AT HIGH TEMPERATURES RESULTING IN EXPLOSIONS OR RUPTURE OF STORAGE CONTAINERS.

HAZARDOUS COMBUSTION PRODUCTS:
OXIDES OF CARBON. OXIDES OF SULFUR. OXIDES OF NITROGEN. IRRITATING ORGANIC VAPOURS.

6. ACCIDENTAL RELEASE MEASURES

USE PERSONAL PROTECTION RECOMMENDED IN SECTION 8, ISOLATE THE HAZARD AREA AND DENY ENTRY TO UNNECESSARY AND UNPROTECTED PERSONNEL.

ENVIRONMENTAL PRECAUTIONS:
DO NOT ALLOW PRODUCT TO ENTER SEWER OR WATERWAYS.

CLEAN-UP METHODS:
REMOVE ALL SOURCES OF IGNITION. EVACUATE AND VENTILATE SPILL AREA; DIKE SPILL TO PREVENT ENTRY INTO WATER SYSTEM; WEAR FULL PROTECTIVE EQUIPMENT DURING CLEAN-UP. SOAK UP WITH INERT ABSORBENT MATERIAL (E.G. SAND, SILICA GEL, ACID BINDER, UNIVERSAL BINDER, SAWDUST). SCRAPE UP AS MUCH MATERIAL AS POSSIBLE. STORE IN A PARTLY FILLED, CLOSED CONTAINER UNTIL DISPOSAL. REFER TO SECTION 8 "EXPOSURE CONTROLS / PERSONAL PROTECTION" PRIOR TO CLEAN UP.

7. HANDLING AND STORAGE

top

HANDLING:
USE ONLY WITH ADEQUATE VENTILATION. PREVENT CONTACT WITH EYES, SKIN AND CLOTHING. DO NOT BREATHE VAPOR AND MIST. WASH THOROUGHLY AFTER HANDLING. KEEP CONTAINER CLOSED. REFER TO SECTION 8.

STORAGE:
FOR SAFE STORAGE, STORE AT OR BELOW 38 DEG. C (100.4 DEG. F)
KEEP IN A COOL, WELL VENTILATED AREA AWAY FROM HEAT, SPARKS AND OPEN FLAME.
KEEP CONTAINER TIGHTLY CLOSED UNTIL READY FOR USE.

FOR INFORMATION ON PRODUCT SHELF LIFE CONTACT HENKEL CUSTOMER SERVICE AT (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

top

EMPLOYERS SHOULD COMPLETE AN ASSESSMENT OF ALL WORKPLACES TO DETERMINE THE NEED FOR, AND SELECTION OF, PROPER EXPOSURE CONTROLS AND PROTECTIVE EQUIPMENT FOR EACH TASK PERFORMED.

HAZARDOUS COMPONENT(S)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
POLYGLYCOL DIMETHACRYLATE	NONE	NONE	NONE	NONE
POLYGLYCOL OLEATE	NONE	NONE	NONE	NONE
SACCHARIN	NONE	NONE	NONE	NONE
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	10 MG/M3 TWA INHALABLE DUST. 3 MG/M3 TWA RESPIRABLE FRACTION.	20 MPPCF TWA 0.8 MG/M3 TWA	NONE	NONE
CUMENE HYDROPEROXIDE	NONE	NONE	1 PPM (6 MG/M3)	NONE

			TWA (SKIN)	
PROPANE-1,2-DIOL	NONE	NONE	10 MG/M3 TWA AEROSOL.	NONE
TITANIUM DIOXIDE	10 MG/M3 TWA	15 MG/M3 PEL TOTAL DUST.	NONE	NONE
CUMENE	50 PPM TWA	50 PPM (245 MG/M3) PEL (SKIN)	NONE	NONE

ENGINEERING CONTROLS:
PROVIDE ADEQUATE LOCAL EXHAUST VENTILATION TO MAINTAIN WORKER EXPOSURE BELOW EXPOSURE LIMITS.

RESPIRATORY PROTECTION:
USE NIOSH APPROVED RESPIRATOR IF THERE IS POTENTIAL TO EXCEED EXPOSURE LIMIT(S).

EYE/FACE PROTECTION:
SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS. FULL FACE PROTECTION SHOULD BE USED IF THE POTENTIAL FOR SPLASHING OR SPRAYING OF PRODUCT EXISTS. SAFETY SHOWERS AND EYE WASH STATIONS SHOULD BE AVAILABLE.

SKIN PROTECTION:
USE CHEMICAL RESISTANT, IMPERMEABLE CLOTHING INCLUDING GLOVES AND EITHER AN APRON OR BODY SUIT TO PREVENT SKIN CONTACT. NEOPRENE GLOVES. BUTYL RUBBER GLOVES. NATURAL RUBBER GLOVES.

9. PHYSICAL AND CHEMICAL PROPERTIES

top

PHYSICAL STATE: LIQUID

COLOR: PURPLE

ODOR: MILD

ODOR THRESHOLD: NOT AVAILABLE.

PH: NOT APPLICABLE

VAPOR PRESSURE: <5 MMHg (27 DEG. C (80.6 DEG. F))

BOILING POINT/RANGE: >149 DEG. C (>300.2 DEG. F)

MELTING POINT/RANGE: NOT AVAILABLE.

SPECIFIC GRAVITY: 1.05

VAPOR DENSITY: NOT AVAILABLE.

FLASH POINT: >93.3 DEG. C (>199.94 DEG. F) TAGLIABUE CLOSED CUP

FLAMMABLE/EXPLOSIVE LIMITS - LOWER: NOT AVAILABLE.
FLAMMABLE/EXPLOSIVE LIMITS - UPPER: NOT AVAILABLE.

AUTOIGNITION TEMPERATURE: NOT AVAILABLE.

EVAPORATION RATE: NOT AVAILABLE.

SOLUBILITY IN WATER: SLIGHT

PARTITION COEFFICIENT (N-OCTANOL/WATER): NOT AVAILABLE.

VOC CONTENT:
0.19%; 1.79 G/L METHOD 40 CFR PART 63 APPENDIX A TO SUBPART PPPP

VISCOSITY: NOT AVAILABLE.

DECOMPOSITION TEMPERATURE: NOT AVAILABLE.

10. STABILITY AND REACTIVITY

top

STABILITY: STABLE UNDER NORMAL CONDITIONS OF STORAGE AND USE.

HAZARDOUS REACTIONS:
NONE UNDER NORMAL PROCESSING. POLYMERIZATION MAY OCCUR AT ELEVATED TEMPERATURE OR IN THE PRESENCE OF INCOMPATIBLE MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS:
OXIDES OF CARBON. OXIDES OF SULFUR. OXIDES OF NITROGEN. IRRITATING ORGANIC VAPOURS.

INCOMPATIBLE MATERIALS: STRONG OXIDIZING AGENTS.

REACTIVITY: NOT AVAILABLE.

CONDITIONS TO AVOID:
ELEVATED TEMPERATURES. HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION. STORE AWAY FROM INCOMPATIBLE MATERIALS.

11. TOXICOLOGICAL INFORMATION

top

RELEVANT ROUTES OF EXPOSURE: SKIN, INHALATION, EYES, INGESTION

POTENTIAL HEALTH EFFECTS/SYMPTOMS:

INHALATION:
INHALATION OF VAPORS OR MISTS OF THE PRODUCT MAY BE IRRITATING TO THE RESPIRATORY SYSTEM.

SKIN CONTACT: CAUSES SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION.

EYE CONTACT: CAUSES EYE IRRITATION.

INGESTION: MAY CAUSE GASTROINTESTINAL TRACT IRRITATION IF SWALLOWED.

HAZARDOUS COMPONENT(S)	LD50S AND LC50S	IMMEDIATE AND DELAYED HEALTH EFFECTS
POLYGLYCOL DIMETHACRYLATE	NONE	ALLERGEN, IRRITANT
POLYGLYCOL OLEATE	NONE	IRRITANT
SACCHARIN	NONE	NO TARGET ORGANS
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	NONE	NUISANCE DUST
CUMENE HYDROPEROXIDE	NONE	ALLERGEN, CENTRAL NERVOUS SYSTEM, CORROSIVE, IRRITANT, MUTAGEN
PROPANE-1,2-DIOL	ORAL LD50 (RABBIT): 18 G/KG ORAL LD50 (RAT): 30 G/KG	IRRITANT
TITANIUM DIOXIDE	NONE	IRRITANT, RESPIRATORY, SOME EVIDENCE OF CARCINOGENICITY
CUMENE	ORAL LD50 (RAT): 2.91 G/KG ORAL LD50 (RAT): 1,400 MG/KG INHALATION LC50 (RAT, 4 H): 8000 PPM	CENTRAL NERVOUS SYSTEM, IRRITANT, LUNG

HAZARDOUS COMPONENT(S)	NTP CARCINOGEN	IARC CARCINOGEN	OSHA CARCINOGEN (SPECIFICALLY REGULATED)
POLYGLYCOL DIMETHACRYLATE	NO	NO	NO
POLYGLYCOL OLEATE	NO	NO	NO

SACCHARIN	NO	NO	NO
SILICA, AMORPHOUS, FUMED, CRYSTAL-FREE	NO	NO	NO
CUMENE HYDROPEROXIDE	NO	NO	NO
PROPANE-1,2-DIOL	NO	NO	NO
TITANIUM DIOXIDE	NO	GROUP 2B	NO
CUMENE	REASONABLY ANTICIPATED TO BE A HUMAN CARCINOGEN.	GROUP 2B	NO

12. ECOLOGICAL INFORMATION

top

ECOLOGICAL INFORMATION: NOT AVAILABLE.

13. DISPOSAL CONSIDERATIONS

top

INFORMATION PROVIDED IS FOR UNUSED PRODUCT ONLY.

RECOMMENDED METHOD OF DISPOSAL:
FOLLOW ALL LOCAL, STATE, FEDERAL AND PROVINCIAL REGULATIONS FOR DISPOSAL.

HAZARDOUS WASTE NUMBER: NOT A RCRA HAZARDOUS WASTE.

14. TRANSPORT INFORMATION

top

THE TRANSPORT INFORMATION PROVIDED IN THIS SECTION ONLY APPLIES TO THE MATERIAL/FORMULATION ITSELF, AND IS NOT SPECIFIC TO ANY PACKAGE/CONFIGURATION.

U.S. DEPARTMENT OF TRANSPORTATION GROUND (49 CFR):
PROPER SHIPPING NAME: NOT REGULATED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA):
PROPER SHIPPING NAME: NOT REGULATED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

WATER TRANSPORTATION (IMO/IMDG):
PROPER SHIPPING NAME: NOT REGULATED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE

ADDITIONAL INFORMATION:
IMDG-CODE: SEGREGATION GROUP 1-ACIDS

15. REGULATORY INFORMATION

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UNITED STATES REGULATORY INFORMATION:

TSCA 8 (B) INVENTORY STATUS:
ALL COMPONENTS ARE LISTED OR ARE EXEMPT FROM LISTING ON THE TOXIC SUBSTANCES CONTROL ACT INVENTORY.

TSCA 12 (B) EXPORT NOTIFICATION: NONE ABOVE REPORTING DE MINIMIS

CERCLA/SARA SECTION 302 EHS: NONE ABOVE REPORTING DE MINIMIS

CERCLA/SARA SECTION 311/312: IMMEDIATE HEALTH, DELAYED HEALTH

CERCLA/SARA SECTION 313:
THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 (40 CFR 372). SACCHARIN (CAS# 81-07-2). CUMENE HYDROPEROXIDE (CAS# 80-15-9).

CERCLA REPORTABLE QUANTITY:
CUMENE HYDROPEROXIDE (CAS# 80-15-9): 10 LBS. (4.54 KG)

CALIFORNIA PROPOSITION 65:
THIS PRODUCT CONTAINS A CHEMICAL KNOWN IN THE STATE OF CALIFORNIA TO CAUSE CANCER. THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

CANADA REGULATORY INFORMATION:

CEPA DSL/NDSL STATUS:
ALL COMPONENTS ARE LISTED ON OR ARE EXEMPT FROM LISTING ON THE CANADIAN DOMESTIC SUBSTANCES LIST.

16. OTHER INFORMATION

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THIS SAFETY DATA SHEET CONTAINS CHANGES FROM THE PREVIOUS VERSION IN SECTIONS: NEW SAFETY DATA SHEET FORMAT. 11

PREPARED BY: SHEILA GINES, REGULATORY AFFAIRS SPECIALIST

ISSUE DATE: 07/08/2015

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Safety Data Sheet according to Regulation (EC) No 1907/2006

SDS No. : 150233
V005.0

LOCTITE® 242® THREADLOCKER

Revision: 22.03.2017
printing date: 21.04.2017
Replaces version from: 18.12.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
LOCTITE® 242® THREADLOCKER

Contains:
Cumene hydroperoxide

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use:
Adhesive

1.3. Details of the supplier of the safety data sheet
Henkel Ltd
Wood Lane End
HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000
Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

1.4. Emergency telephone number
24 Hours Emergency Tel: +44 (0)1442 278497

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H335 May cause respiratory irritation.	
Target organ: respiratory tract irritation	
Chronic hazards to the aquatic environment	Category 3
H412 Harmful to aquatic life with long lasting effects.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:

Signal word:	Warning
Hazard statement:	H319 Causes serious eye irritation. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statement: Prevention	P261 Avoid breathing vapours. P273 Avoid release to the environment.
Precautionary statement: Response	P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
None if used properly.
Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:
Anaerobic Sealant

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Cumene hydroperoxide 80-15-9	201-254-7	1- < 3 %	Acute Tox. 4; Dermal H312 STOT RE 2 H373 Acute Tox. 4; Oral H302 Org. Perox. E H242 Acute Tox. 3; Inhalation H331 Aquatic Chronic 2 H411 Skin Corr. 1B H314
N,N-Diethyl-p-toluidine 613-48-9	210-345-0	0,1- < 1 %	Acute Tox. 3; Oral H301 Acute Tox. 3; Dermal H311 Acute Tox. 3; Inhalation H331 STOT RE 2 H373 Aquatic Chronic 3 H412
1,4-Naphthalenedione 130-15-4	204-977-6	0,01- < 0,1 %	Acute Tox. 3; Oral H301 Skin Irrit. 2; Dermal H315 Skin Sens. 1; Dermal H317 Eye Irrit. 2 H319 Acute Tox. 1; Inhalation H330 STOT SE 3; Inhalation H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 M factor (Acute Aquat Tox): 10 M factor (Chron Aquat Tox): 10

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.

Skin contact:
Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
EYE: Irritation, conjunctivitis.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

Prolonged or repeated contact may cause skin irritation.

4.3. Indication of any immediate medical attention and special treatment needed
See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons:
High pressure waterjet

5.2. Special hazards arising from the substance or mixture
In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.
Oxides of carbon, oxides of nitrogen, irritating organic vapors.

5.3. Advice for firefighters
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Additional information:
In case of fire, keep containers cool with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation.
Avoid contact with skin and eyes.
Wear protective equipment.

6.2. Environmental precautions
Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up
For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

6.4. Reference to other sections
See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Use only in well-ventilated areas.
Avoid skin and eye contact.
See advice in section 8

Hygiene measures:
Good industrial hygiene practices should be observed.
Wash hands before work breaks and after finishing work.
Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities
Refer to Technical Data Sheet

7.3. Specific end use(s)
Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, INHALABLE DUST]		6	Time Weighted Average (TWA):		EH40 WEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		EH40 WEL
Propane-1,2-diol 57-55-6 [PROPANE-1,2-DIOL, PARTICULATES]		10	Time Weighted Average (TWA):		EH40 WEL
Propane-1,2-diol 57-55-6 [PROPANE-1,2-DIOL, TOTAL VAPOUR AND PARTICULATES]	150	474	Time Weighted Average (TWA):		EH40 WEL

Occupational Exposure Limits

Valid for
Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, TOTAL INHALABLE DUST]		6	Time Weighted Average (TWA):		IR_OEL
Silicon dioxide 112945-52-5 [SILICA, AMORPHOUS, RESPIRABLE DUST]		2,4	Time Weighted Average (TWA):		IR_OEL
Propane-1,2-diol 57-55-6 [PROPANE-1,2-DIOL, PARTICULATES]		10	Time Weighted Average (TWA):		IR_OEL
Propane-1,2-diol 57-55-6 [PROPANE-1,2-DIOL, TOTAL (VAPOUR AND PARTICULATES)]	150	470	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (freshwater)		0,0031 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (marine water)		0,00031 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	aqua (intermittent releases)		0,031 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	Sewage treatment plant		0,35 mg/l				
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sediment (freshwater)				0,023 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	sediment (marine water)				0,0023 mg/kg		
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	soil				0,0029 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
.alpha.,.alpha.-Dimethylbenzyl hydroperoxide 80-15-9	Workers	inhalation	Long term exposure - systemic effects		6 mg/m3	

Biological Exposure Indices:
None

8.2. Exposure controls:

Engineering controls:
Ensure good ventilation/extraction.

Respiratory protection:
Ensure adequate ventilation.
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A (EN 14387)

Hand protection:
Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
Protective eye equipment should conform to EN166.

Skin protection:
Wear suitable protective clothing.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid liquid blue
Odor	mild
Odour threshold	No data available / Not applicable
pH	Not available.
pH	Not applicable
Initial boiling point	> 149,0 °C (> 300.2 °F)
Flash point	> 93,3 °C (> 199.94 °F); Tagliabue closed cup
Decomposition temperature	No data available / Not applicable
Vapour pressure (27 °C (80.6 °F))	< 6,67 mbar
Density ()	1,1 g/cm3
Bulk density	No data available / Not applicable
Viscosity	No data available / Not applicable
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative) (Solvent: Water)	Slight
Solubility (qualitative) (Solvent: Acetone)	Not available.
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity
None if used properly.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
See section reactivity

10.4. Conditions to avoid
Stable under normal conditions of storage and use.

10.5. Incompatible materials
See section reactivity.

10.6. Hazardous decomposition products
None if used for intended purpose.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

General toxicological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:
May cause respiratory irritation.

Oral toxicity:
This material is considered to have low toxicity if swallowed.
May cause irritation to the digestive tract.

Inhalative toxicity:
May cause irritation to respiratory system.

Skin irritation:
Prolonged or repeated contact may cause skin irritation.

Eye irritation:
Causes serious eye irritation.

Acute oral toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	not specified
1,4-Naphthalenedione 130-15-4	LD50	190 mg/kg	oral		rat	not specified

Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LD50	1.200 - 1.520 mg/kg	dermal			not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	not specified

Repeated dose toxicity

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	not specified

SECTION 12: Ecological information

General ecological information:
The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

12.1. Toxicity

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LC50	3,9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3,1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		not specified
1,4-Naphthalenedione 130-15-4	EC50	0,011 mg/l	Algae	72 h	Dunaliella bioculata	OECD Guideline 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability

Persistence and Biodegradability:
The product is not biodegradable.

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4		no data	0 - 60 %	OECD 301 A - F

12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility:
Cured adhesives are immobile.

Bioaccumulative potential:
No data available for the product.

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Cumene hydroperoxide 80-15-9		9,1		calculation		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	2,16					not specified
1,4-Naphthalenedione 130-15-4	1,71					not specified

12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Cumene hydroperoxide 80-15-9	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:
Collection and delivery to recycling enterprise or other registered elimination institution.
Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages:
After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances
The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.2. UN proper shipping name

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.3. Transport hazard class(es)

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.4. Packing group

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.5. Environmental hazards

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.6. Special precautions for user

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (2010/75/EC) < 3 %

15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text
of all abbreviations indicated by codes in this safety data sheet are as follows:

H242 Heating may cause a fire.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Further information:
This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Label elements (DPD):

Xi - Irritant

Risk phrases:
R36/37 Irritating to eyes and respiratory system.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
Do not breathe vapour.
S25 Avoid contact with eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S51 Use only in well-ventilated areas.
S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.

Revision Number: 010.0

Issue date: 10/12/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **Loctite 262 Threadlocker**
Product type: Anaerobic Sealant
Restriction of Use: None identified
Company address:
Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

IDH number: 487231
Item number: 37420
Region: United States
Contact information:
Telephone: (860) 571-5100
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
WARNING:	CAUSES SKIN AND EYE IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2B
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	2

PICTOGRAM(S)

Precautionary Statements

Prevention: Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

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

Storage: Not prescribed

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Saccharin	81-07-2	1 - 5
Ethene, homopolymer	9002-88-4	1 - 5
Cumene hydroperoxide	80-15-9	1 - 5
Cumene	98-82-8	0.1 - 1
Methyl methacrylate	80-62-6	0.1 - 1

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Symptoms: See Section 11.

5. FIRE FIGHTING MEASURES

Extinguishing media: Water spray (fog), foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.

Unusual fire or explosion hazards: Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers.

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen. Irritating vapors.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed. Refer to Section 8.

Storage: For safe storage, store between 0 °C (32°F) and 32 °C (89.6 °F)
Keep in a cool, well ventilated area away from heat, sparks and open flame.
Keep container tightly closed until ready for use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Saccharin	None	None	None	None
Ethene, homopolymer	10 mg/m3 TWA Inhalable particles. 3 mg/m3 TWA Respirable particles.	15 MPPCF TWA Respirable fraction. 15 mg/m3 TWA Total dust. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Methyl methacrylate	50 ppm TWA 100 ppm STEL (Dermal sensitization)	100 ppm (410 mg/m3) PEL	None	50 ppm

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

Skin protection: Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Red
Odor: Mild
Odor threshold: Not available.
pH: Not applicable
pH: Not applicable
Vapor pressure: < 5 mm hg (27 °C (80.6 °F))
Boiling point/range: > 149 °C (> 300.2 °F)
Melting point/ range: Not available.
Specific gravity: 1.05

Vapor density:	Not available.
Flash point:	> 93.3 °C (> 199.94 °F) Tagliabue closed cup
Flammable/Explosive limits - lower:	Not available.
Flammable/Explosive limits - upper:	Not available.
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Slight
Partition coefficient (n-octanol/water):	Not available.
VOC content:	0 %; 0 g/l
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.

Hazardous decomposition products: Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Phenolics. Irritating organic vapours.

Incompatible materials: Iron. Copper. Rust. Aluminum. Zinc. Reducing agents. Strong acids and oxidizing agents. Oxygen scavengers. Strong alkalis.

Reactivity: Not available.

Conditions to avoid: Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.
Skin contact: Causes skin irritation. May cause allergic skin reaction.
Eye contact: Causes eye irritation.
Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Saccharin	Oral LD50 (Mouse) = 17 g/kg	No Target Organs
Ethene, homopolymer	None	No Target Organs
Cumene hydroperoxide	Inhalation LC50 (Mouse, 4 h) = 200 mg/l	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Cumene	Oral LD50 (Rat) = 2.91 g/kg Oral LD50 (Rat) = 1,400 mg/kg Inhalation LC50 (Rat, 4 h) = 8000 ppm	Central nervous system, Irritant, Lung
Methyl methacrylate	Oral LD50 (Rat) = 7,800 mg/kg Oral LD50 (Rabbit) = 6,000 mg/kg Oral LD50 (Rat) = 9,400 mg/kg	Allergen, Irritant, Kidney, Liver, Mutagen, Nervous System, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Saccharin	No	No	No
Ethene, homopolymer	No	No	No
Cumene hydroperoxide	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Methyl methacrylate	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)
Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
DOT Hazardous Substance(s): alpha,alpha-Dimethylbenzylhydroperoxide

International Air Transportation (ICAO/IATA)
Proper shipping name: RQ, Environmentally hazardous substance, liquid, n.o.s.
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name:	RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification:	None above reporting de minimis
CERCLA/SARA Section 302 EHS:	None above reporting de minimis.
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health
CERCLA/SARA Section 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Saccharin (CAS# 81-07-2). Cumene hydroperoxide (CAS# 80-15-9).
CERCLA Reportable quantity:	Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 10/12/2017

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MATERIAL SAFETY DATA SHEET

Product name:	**CF 128-DW Insulating Foam for Doors and Windows**
Description:	Urethane resin system
Supplier:	Hilti, Inc. P.O. Box 21148, Tulsa, OK 74121
Emergency # (Chem-Trec.):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 001 703 527 3887 (other countries)

INGREDIENTS AND EXPOSURE LIMITS

Ingredients:	CAS Number:	PEL:	TLV:	STEL:
Urethane / polyol prepolymer *	NE / Mixture	NE	NE	NE
4,4' diphenylmethane diisocycanate (free MDI) *	101-68-8	C: 20 ppb	5 ppb	NE
1,1,1,2 tetrafluoroethane	811-97-2	NE	NE	NE
Dimethyl ether	115-10-6	NE	NE	NE
Butane	106-97-8	NE	800 ppm	NE
Propane	074-98-6	1000 ppm	2500 ppm	NE

* MDI isomers and homologues are partially linked with a polyol mixture. Excess MDI is available in the mixture (container); however MDI is completely (>99.9%) reacted while curing.

Abbreviations: PEL = OSHA Permissible Exposure Limit. **TLV** = ACGIH Threshold Limit Value. **STEL** = Short Term Exposure Limit. **C** = Ceiling. **NE** = None Established. **NA** = Not Applicable

PHYSICAL DATA

Appearance:	Yellow to tan liquid.	**Odor:**	Mild.
Vapor Density: (air = 1)	> 1 (MDI Polymer)	**Vapor Pressure:**	5 - 5.6 bar @ 68° F
Boiling Point:	Not determined.	**VOC Content:**	100 g/l
Evaporation Rate:	< .1 (ether = 1)	**Solubility in Water:**	Not soluble.
Specific Gravity:	1.1	**pH:**	Not determined.

FIRE AND EXPLOSION HAZARD DATA

Flash Point:	- 40° F (propellants)	**Flammable Limits:**	1.9 - 27%
Extinguishing Media:	Aerosol cans: CO_2, Dry Chemical, Foam. Cured foam: CO_2, Dry Chemical, Foam, Water		
Special Fire Fighting Proc.	None known for cured foam. Uncured isocyanates react with water to release CO_2.		
Unusual Fire and Explosion Hazards:	Extremely flammable. Contains flammable propellants under pressure. Aerosol cans exposed to fire or direct heat can rupture from pressure build-up. CAUTION: Do not heat cold cans with a torch or flame to raise product temperature. This may cause the can to burst.		

REACTIVITY DATA

Stability:	Reacts (i.e. expands at a ratio of > 40:1 to form a polyurethane foam) upon contact with air. Contact with moisture or water will also cause material to polymerize (non-violently).
Hazardous Polymerization:	Will not occur. Reacts with water (nonviolently).
Incompatibility:	Alcohols, amines, strong bases, alkali metal compounds.
Decomposition Products:	Thermal decomposition of uncured foam can yield CO, CO_2, HCN, HCNO, HCl, NO_x, PO_x Thermal decomposition products from cured foam include CO_x, NO_x and traces of HCN and HCl.
Conditions to Avoid:	Temperature extremes will shorten product shelf life; i.e. below 40° F / above 100° F. Contact with air or moisture will cause foam to polymerize (cure).

HEALTH HAZARD DATA

Known Hazards:	**Acute**: Eye, skin, and respiratory irritation. **Chronic**: Sensitization
Signs and Symptoms of Exposure:	**Eyes:** Can adhere to cornea. **Skin:** Can adhere to the skin. Can cause irritation and possibly sensitization; e.g. itching, swelling, rashes, etc. **Inhalation:** Vapor generated when heated to temperatures > 100° F can cause irritation of the breathing tract. Some individuals can develop an allergic (asthmatic-like) response. **Ingestion:** Effects of ingestion have not been determined. Not a likely route of exposure. No ill effects expected.
Routes of Exposure:	Inhalation. Contact.

Carcinogenicity:	No ingredients are classified as a carcinogen by IARC, NTP or OSHA.
Medical Conditions Aggravated by Exposure:	Eye, skin, and respiratory conditions.

EMERGENCY AND FIRST AID PROCEDURES

Eyes:	**Immediately** flush with large amounts of clean water and seek medical attention.
Skin:	Cured product is difficult to remove from the skin. Remove immediately with soap and warm water. Acetone may remove uncured product. If material has hardened, use Hilti MC 400 Hand Cleaner or a light mineral oil. If still unable to remove, buff off with a pumice stone.
Inhalation:	Should sensitization occur, immediately move to fresh air. Call a physician if symptoms persist. Those individuals who develop an allergic reaction should avoid future use of this product.
Ingestion:	Seek medical attention. Do not induce vomiting unless directed by a physician.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure. If sensitization occurs, future contact with the material should be avoided.

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Ventilation:	General (natural or mechanically induced fresh air movements).
Eye Protection:	Goggles recommended; safety glasses with side shields as a minimum.
Skin Protection:	Cotton gloves are suitable.
Respiratory Protection:	Not normally required.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling and Storing Precautions:	Avoid contact. Material will adhere to eyes and skin. Contents under pressure. Extremely flammable. Do not apply direct heat to the cans. Before using, remove ignition sources such as flames or equipment / tools that generate sparks. Store in a cool dry place. Do not store in direct sunlight. Keep from freezing. Store between 40° and 100° F. Always wash thoroughly after handling chemical products. For industrial use only. Keep out of reach of children. Follow label / use instructions. Storage classifications: NFPA = Level 3; OSHA = Class 1A.
Spill Procedures:	Wear appropriate personal protective equipment. CF 128-DW insulating foam will polymerize (cure) upon contact with air/moisture. Allow product to cure, then remove for disposal. See disposal guidelines below.

REGULATORY INFORMATION

TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	This product contains 5 - 15% 4, 4' diphenylmethane diisocyanate (CAS # 101-68-8) which is subject to reporting under Section 313 of SARA Title III (40 CFR Part 372). (Technical note: MDI is not available in cured foam due to reaction of parts A and B upon exposure to air; i.e. when released from the can)
DOT Shipping Name:	Consumer Commodity, ORM-D.
IATA / ICAO Shipping Name:	Aerosols, Class 2.1, UN 1950
HMIS Codes:	Health 2, Flammability 3, Reactivity 1, PPE B (Goggles, Gloves)
EPA Waste Code(s):	D003 (for aerosol cans) / not regulated if product has been dispensed and has cured
Waste Disposal Methods:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, state, and federal safety, health and environmental regulations.

CONTACTS

Customer Service:	1 800 879 8000	**Technical Service:**	1 800 879 8000
Health / Safety:	1 800 879 6000 Jerry Metcalf (x6704)		
Emergency # (Chem-Trec):	1 800 424 9300 (USA, PR, Virgin Islands, Canada); 703 527 3887 (other countries)		

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.

Trade name: **Duct Seal**

SECTION 1: Identification

Product identifier: **Duct Seal.**
Synonyms: None available.
Product Code Number: 31-601, 31-605.
SDS number: ID008
Recommended use: Duct Sealer.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:

Company Name: IDEAL INDUSTRIES, INC.
Company Address: Becker Place,
Sycamore, IL 60178
Company Telephone: Office hours (Mon – Fri)
7AM - 5 PM (CDT)
(815)895-5181
Company Contact Name: Darryl Docter.
Company Contact Email: IDEAL@IDEALINDUSTRIES.COM
Emergency phone number: 24 HOUR EMERGENCY NUMBER:
(815)895-5181.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards
Not classified as a physical hazard under GHS criteria

Health hazards
Not classified as a health hazard under GHS criteria

Environmental hazards
Not classified as an environmental hazard under GHS criteria.

GHS Signal word: **Not applicable.**

GHS Hazard statement(s): Not applicable.

GHS Hazard symbol(s): Not applicable.

GHS Precautionary statement(s):

Prevention:
No prevention precautionary statements required.

Response:
No response precautionary statements required.

Storage:
No storage precautionary statements required.

Disposal:
No disposal precautionary statements required.

Hazard(s) not otherwise Classified (HNOC): None known.

Percentage of ingredient(s) of unknown acute toxicity:
Not applicable.

SECTION 3: Composition/information on ingredients

Mixture:

Chemical name	CAS#	Concentration (weight %)
None of the chemical raw materials contained in this formulation are considered hazardous under the Federal Hazards Communication Standard 29 C. F. R 1910.1200		

SECTION 4: First-aid Measures

Description of necessary measures:
Inhalation: Not applicable.

Skin contact: If too sensitive, seek medical attention/

Eye contact: In case of contact, do not remove. Get medical attention.

Ingestion: Not likely. If ingested, constipation or blockage may occur. Seek medical attention.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Use water, foam, carbon dioxide or dry chemical. Nitrogen oxides and carbon monoxides may be involved.

Unsuitable extinguishing media: No data available.

Special protective equipment and precautions for fire-fighters: For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. Use self-contained breathing apparatus with full face shield to protect against the hazardous effects of combustion products and oxygen deficiencies.

SECTION 6: Accidental release measures

Leak or spill procedure:
As the product is a solid, a spill is not really possible. If the material is dumped or falls in an undesirable location and is no longer usable, dispose of the material as described in section 13 of this document.

SECTION 7: Handling and Storage

Precautions for safe handling: Wash hands thoroughly with soap and water before eating.

Conditions for safe storage, including any incompatibles: Store in a cool, dry place.

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance	**PEL-TWA (8 hour)**	**PEL-STEL (15 min)**
Not applicable		

US ACGIH Threshold Limit Values		
Substance	**TLV-TWA (8 hour)**	**TLV-STEL (15 min)**
Not applicable		

NIOSH Exposure Limits		
Substance	**TWA**	**STEL**

Not applicable		

Appropriate engineering controls: General (mechanical) room ventilation is expected to be adequate. Special local ventilation is recommended to keep dust below exposure limits. Wash hands before breaks and at the end of work day.

Individual protection measures, such as personal protective equipment:

Eye/face protection: The use of OSHA compliant safely glasses or goggles are recommended.

Skin and Hand protection: None normally required. For sensitive individuals, protect skin from contact. Use cotton gloves if required.

Respiratory protection: None required.

Other: None required.

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance	
Physical state:	Solid
Form:	Dark gray putty.
Color:	Dark gray.
Odor:	No odor.
Odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	None
Flash point:	310^{o}C
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits	
Flammability limit – lower %):	Not applicable
Flammability limit – upper (%):	Not applicable
Explosive limit – lower (%):	Not applicable
Explosive limit – upper (%):	Not applicable
Vapor pressure:	No data available
Vapor density:	No data available
Relative Density:	1.78
Solubility(ies):	Insoluble.
Partition coefficient (n-octanol/water):	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available

Viscosity: No data available
Other information:
% Volatile by volume: 2%
Volatile Organic Compounds (VOC) (as packaged, minus water) 17 grams/liter
Percent solids by weight: ~ 98%

SECTION 10: Stability and Reactivity

Reactivity: Not chemically reactive.
Chemical stability: Stable, no chemical decomposition.
Possibility of hazardous reactions: Hazardous reactions not anticipated.
Conditions to avoid: None.
Hazardous decomposition Products: None known.

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Not an expected route of entry.
Ingestion: Not an expected route of entry.
Skin: Skin contact is a primary route of entry.
Eyes: Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:
None known.

Delayed and immediate effects and chronic effects from short or long-term exposure:
None known.

Numerical measures of toxicity:

Ingredient Information:

Substance	Test Type (species)	Value
Not applicable	LD_{50} Oral (Rat)	
	LD_{50} Dermal (Rabbit)	
	LC_{50} Inhalation (Rat)	

Product Acute Toxicity Estimates:

Acute Oral Toxicity – no data available
Acute Dermal Toxicity - no data available
Acute Inhalation Toxicity - no data available

Skin corrosion/irritation: No information available on the mixture, however none of the components have been classified to cause skin corrosion/irritation (or are below the concentration threshold for classification).

Serious eye damage/eye irritation: No information available on the mixture, however none of the components have been classified to cause eye damage/irritation (or are below the concentration threshold for classification).

Respiratory sensitization: Not applicable. Product is a solid.

Skin sensitization: No information available on the mixture, however none of the components have been classified as a skin sensitizer (or are below the concentration threshold for classification).

Germ cell mutagenicity: None known.

Carcinogenicity: No evidence.

Reproductive toxicity: None known.

Specific target organ toxicity-Single exposure: None known.

Specific target organ toxicity-Repeat exposure: None known.

Aspiration hazard: None known.

Further information: No data available.

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
Not applicable	LC_{50}	Fish	
	LC_{50}	Aquatic crustacea	
	EC_{50}	Algae	

Persistence and Degradability: No data available
Bioaccumulative Potential: No data available.
Mobility in Soil: Accidental droppings may lead to mixing with soil, but there is no evidence

that this would cause adverse ecological effects.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:

To the best of our knowledge the product is not considered hazardous based on U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in accordance with all local, state and federal regulations.

SECTION 14: Transport Information

DOT: This material is not classified as dangerous under DOT regulations.

IATA: This material is not classified as dangerous under IATA regulations.

IMDG: This material is not classified as dangerous under IMDG regulations.

SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:
Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:
None listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):

Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):
This product contains the following materials that are subject to the reporting requirements of Section 313 of EPCRA: 14808-60-7 Crystalline Quartz Silica – 0.5%.

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: This product does not contain any chemicals known to the state of California to cause cancer or birth defects.

Massachusetts Right to Know: This product does not contain any chemicals listed on the Massachusetts Right to Know List.

Minnesota Hazardous Substance List: This product does not contain any chemicals listed on the Minnesota Hazardous Substance List.

New Jersey Right to Know: This product does not contain any chemicals listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: This product does not contain any chemicals is listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: Not regulated.

SECTION 16: Other information, including date of preparation or last revision.

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume 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 which exist.

MSDS

MSDS No: 30
Rev Date: 5/18/10
Rev No: 3

1 MATERIAL SAFETY DATA SHEET

Product Name:	**POWERFOAM™ / TRIGGERFOAM™**
Description:	Polyurethane foam filler, insulating foam, backing foam, penetration sealant
Supplier:	Powers Fasteners, Inc. 2 Powers Lane, Brewster, NY 10509
Customer Service:	800-524-3244
Emergency Phone:	**(CHEMTREC) Within USA: (800) 424-9300; Outside USA: 01 (703) 527-3887**

2 INGREDIENTS

	CAS Number		ACGIH TWA	OSHA PEL
Polymethylene polyphenyl isocyanate	9016-87-9	(as MDI)	0.005 ppm	0.02ppm
Dimethyl ether	115-10-6		1000ppm*	NE
Propane	74-98-6		1000ppm*	1000ppm
Isobutane	75-28-5		1000ppm*	NE

*Note: The ACGIH TLV listed above is for Dimethyl ether is an AIHA WEEL. The ACGIH TLVVs listed above for Propane and Isobutane are as *Aliphatic hydrocarbon gases*

This product is classified as hazardous per OSHA regulations (29CFR 1910-1200).

Abbreviations: NE= Not established

3 SAFE USAGE RECOMMENDATIONS

Ventilation: Avoid breathing vapors or mist. Use with adequate ventilation, either natural or mechanical. Sensitized individuals shoud avoid using this product.

Eye Protection: Avoid eye contact. Safety goggles recommended. Wear safety glasses with side shields as a minimum, as product can stick to eyes.

Skin Protection: Avoid skin contact. Wear impermeable gloves. Product can adhere to skin and cause a rash or sentisization.

Respiratory Protection: Vapor may cause irritation of the breathing tract and sensitization. Use in a well-ventillated area.

Notice: For professional use. Keep away from children.

4 EMERGENCY AND FIRST AID PROCEDURES

Eyes: Immediately flush eyes with clean water for 15 minutes and call a physician.

Skin: Wash with soap and water. Launder clothing before reuse. Seek medical attention if any symptoms develop.

Inhalation: If breathing becomes uncomfortable or asthma-like symptoms develop, discontinue use and move to fresh air. Contact physician if symptoms persist.

Ingestion: Immediately rinse mouth with water and call a physician. Drink 1-2 glasses of water. Do not induce vomitting unless directed by a physian.

Other: Contact a physician if there is any question about the seriousness of the exposure.

5 HEALTH HAZARD INFORMATION

Hazards: Direct, prolonged contact with product can cause irritation and sensitization to some individuals. Those who develop an allergic response should avoid future use of this product.

Contents are pressurized for dispensing and are extremely flammable.

6 PHYSICAL CHARACTERISTICS

Appearance:	Beige foam. Sticky when wet.
Density	1.1
Boiling Point:	NE
(Air=1) Vapor Density:	>1
(Water=1) Evaporation Rate:	NE
Specific Gravity:	1.1
VOC Content:	100 g/l
Odor:	Mild amine-like
Solubility in Water:	Insoluble
pH:	NE

7 FIRE, HAZARD AND REACTIVITY DATA

Flammability:	Extremely Flammable **Flash Point:** 0° F (-18° C) Boiling Point: NE
Stability:	Stable. Hazardous polymerization will not occur.
Incompatibility:	Strong acids, bases and alcohols.
Unusual fire or Explosion Hazards:	Extremely flammable. Contains pressurized, flammable propellants. Containers can rupture if exposed to fire or direct heat.
Extinguishing Media:	Foam, COx, HCN, Nox
Fire Fighting:	Self-contained breathing equipment recommended.
Hazardous Combustion Products:	CO, NO, HCN, HCL

8 TRANSPORTATION AND REGULATORY INFORMATION

Hazard Communication:	This MSDS has been prepared in accordance with the federal OSHA Hazard Communication Standard 29 CFR 1910. 1200.
HMIS Codes:	Health: 3, Flammability: 3, Physical Hazard: 1. PPE: B Flash Point: 0° F (-18° C)
US DOT Proper Shipping Name:	Consumer commodity ORM-D
Canadian TDGR Proper Shipping Name:	Consumer commodity (Aerosols) UN1950 Class 2.1, PG: None
IATA/ICAO Proper Shipping Name:	AEROSOLS UN1950 Class 2.1, PG: None
IMO/IMDG Proper Shipping Name:	AEROSOLS UN1950 Class 2.1, PG: None EmS: F-D, S-U
Packing Instructions:	Passenger Aircraft: Y203 or 203 Cargo Aircraft Only: 203
TSCA Inventory Status:	Chemical components listed on TSCA inventory.
SARA Title III, Section 313:	Contains Polymethylene polyphenyl isocyanate.

9 STORAGE, CLEAN-UP, AND DISPOSAL

Storage:	Store in a cool, dry place. Keep from freezing and extreme heat, which may shorten shelf life.
Spills:	Follow above personal protective measures. Product will harden upon contact with air and moisture. After hardening, scrape up foam and dispose of in a sealable container.
Waste Disposal:	Dispose of in accordance with federal, state and local regulations.
EPA Waste Codes:	D001, D003 (aerosol cans)

The information and recommendations provided herin are based on information available to us at the time of preparation. We make no other warranty, expressed or implied, as to its correctness, completeness, or as to the results and reliance of the information.

Powers FASTENERS

SAFETY DATA SHEET

Issue Date 22-Nov-2015 **Revision Date** 10-Jul-2016 **Version** 1

1. IDENTIFICATION

Product identifier
Product Name EXTREME WET PATCH® ROOF LEAK REPAIR

Other means of identification
Product Code HE209XR
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Coatings Sealant
Uses advised against No information available

Details of the supplier of the safety data sheet
Manufacturer Address
HENRY COMPANY
999 N. Sepulveda Blvd., Suite 800
El Segundo, CA 90245-2716
Web Site: www.henry.com www.ca.henry.com

Emergency telephone number
Company Phone Number 800-486-1278
Emergency Telephone CHEMTREC: 800-424-9300
CHEMTREC: 703-527-3887
CANUTEC: 613-966-6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 3

Label elements

Emergency Overview

Warning

Hazard statements
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation. May cause drowsiness or dizziness
Flammable liquid and vapor

Appearance viscous **Physical state** liquid **Odor** Solvent

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ ventilating / lighting/ mixing / equipment
Use only non-sparking tools
Take precautionary measures against static discharge

Precautionary Statements - Response

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 occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed
Store locked up
Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
May be harmful in contact with skin. Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

Unknown acute toxicity
24.67952% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Not applicable

Mixture

Chemical Name	CAS No	Weight-%
Asphalt *	8052-42-4	30 - 60

Fullers earth *	8031-18-3	10 - 30
Solvent naphtha, petroleum, light aromatic *	64742-95-6	10 - 30
Benzene, 1,2,4-trimethyl- *	95-63-6	5 - 10
Rubber compounds *	Proprietary	3 - 7
Cellulose *	9004-34-6	1 - 5
1,2,3-Trimethylbenzene *	526-73-8	1 - 5

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Eye contact Keep eye wide open while rinsing. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

Skin contact Wash off immediately with plenty of water.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.

Ingestion Call a physician or poison control center immediately. Do not induce vomiting without medical advice. Rinse mouth. Never give anything by mouth to an unconscious person.

Self-protection of the first aider Remove all sources of ignition.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Drowsiness. Dizziness.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO2, sand, earth, water spray or regular foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Flammable.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

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 Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Asphalt 8052-42-4	TWA: 0.5 mg/m³ benzene soluble aerosol fume, inhalable fraction	-	Ceiling: 5 mg/m³ fume 15 min
Benzene, 1,2,4-trimethyl- 95-63-6	-	-	TWA: 25 ppm TWA: 125 mg/m³
Cellulose 9004-34-6	TWA: 10 mg/m³	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust TWA: 1 mg/m³
1,2,3-Trimethylbenzene 526-73-8	-	-	TWA: 25 ppm TWA: 125 mg/m³

NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection	Wear protective gloves and 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	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	viscous	**Odor**	Solvent
Color	black	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 150 °C / 302 °F	
Flash point	42 °C / 108 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	6	
Lower flammability limit:	1	
Vapor pressure	No information available	
Vapor density	3.6	
Relative density	1 - 1.1	
Water solubility	Insoluble in water	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	>250 °C / 482 °F	
Decomposition temperature	No information available	
Kinematic viscosity	> 100 mm2/s	@ 40 °C
Dynamic viscosity	No information available	
Explosive properties	Not an explosive	
Oxidizing properties	Not applicable	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.
Possibility of Hazardous Reactions
None under normal processing.
Conditions to avoid
Heat, flames and sparks.
Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Eye contact Irritating to eyes.

Skin contact Irritating to skin.

Ingestion Based on available data, the classification criteria are not met.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Asphalt 8052-42-4	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Solvent naphtha, petroleum, light aromatic 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Benzene, 1,2,4-trimethyl- 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m³ (Rat) 4 h
Cellulose 9004-34-6	> 5 g/kg (Rat)	> 2 g/kg (Rabbit)	> 5800 mg/m³ (Rat) 4 h

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. Vapors may cause drowsiness and dizziness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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 The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Asphalt 8052-42-4	-	Group 2B	-	X
Cellulose 9004-34-6	-	Group 1	Known	X

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
Not classifiable as a human carcinogen
NTP (National Toxicology Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Target Organs. Respiratory system. Eyes. Skin. Central nervous system.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Chronic toxicity May cause adverse effects on the bone marrow and blood-forming system.

Target Organ Effects Eyes, Respiratory system, Skin, blood, Central nervous system, kidney.

Aspiration hazard Based on available data, the classification criteria are not met.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	5,252.00 mg/kg
ATEmix (dermal)	2,573.00 mg/kg
ATEmix (inhalation-dust/mist)	67.40 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

65.68642 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
Asphalt 8052-42-4	6
Benzene, 1,2,4-trimethyl- 95-63-6	3.63

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001

14. TRANSPORT INFORMATION

DOT Not regulated (If shipped in NON BULK packaging by ground transport)

TDG Not regulated (If shipped in NON BULK packaging by ground transport)

IATA

UN/ID no	UN1999
Proper shipping name	Tars, liquid
Hazard Class	3
Packing Group	III
ERG Code	3L
Special Provisions	A3
Description	UN1999, Tars, liquid, 3, III

IMDG Non-regulated per 2.3.2.5

UN/ID no	UN1999
Proper shipping name	Tars, liquid
Hazard Class	3
Packing Group	III

EmS-No	F-E, S-E
Special Provisions	955
Description	UN1999, Tars, liquid, 3, III, (42°C c.c.)

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Benzene, 1,2,4-trimethyl- - 95-63-6	1.0

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Cellulose - 9004-34-6	Carcinogen
Quartz - 14808-60-7	Carcinogen
Cumene - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Asphalt 8052-42-4	X	X	X
Benzene, 1,2,4-trimethyl- 95-63-6	X	X	X
Cellulose 9004-34-6	X	X	X
Quartz 14808-60-7	X	X	X
Xylenes (o-, m-, p- isomers) 1330-20-7	X	X	X
Diethylbenzenes 25340-17-4	X	-	-
Cumene 98-82-8	X	X	X
1,3,5-Trimethylbenzene 108-67-8	-	X	-
Zinc, bis(dibutylcarbamodithioato-S,S)-, (T-4)- 136-23-2	X	-	X
Ethanol, 2-[(2-aminoethyl)amino]- 111-41-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** 2	**Flammability** 2	**Instability** 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** 2	**Flammability** 2	**Physical hazards** 0	**Personal protection** X

Issue Date 22-Nov-2015
Revision Date 10-Jul-2016
Revision Note
No information available

Disclaimer

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.

End of Safety Data Sheet

SAFETY DATA SHEET

WL09210

Section 1. Identification

Product name : WHITE LIGHTNING® Silicone Rubber All Purpose Sealant (RTV Formula) White

Product code : WL09210

Other means of identification : Not available.

Product type : Liquid.

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

Not applicable.

Manufacturer : White Lightning Products
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : (216) 566-2917

Product Information Telephone Number : (800) 241-5295

Regulatory Information Telephone Number : (216) 566-2902

Transportation Emergency Telephone Number : (800) 424-9300

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 CORROSION/IRRITATION - Category 1B
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
CARCINOGENICITY - Category 2
TOXIC TO REPRODUCTION (Fertility) - Category 2

Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 6%
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 13.2%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 13.2%

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Causes severe skin burns and eye damage.
Suspected of damaging fertility.
Suspected of causing cancer.

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.

Section 2. Hazards identification

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.

Response : IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. 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 physician.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

WARNING: This product contains a chemical known to the State of California to cause cancer.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Other means of identification : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Amorphous Silica	10	7631-86-9
Middle Petroleum Distillates	5	64742-46-7
Ethyl Triacetoxysilane	3.65	17689-77-9
Methyl Triacetoxysilane	3.5	4253-34-3
Acetic Acid	2.85	64-19-7
Titanium Dioxide	1	13463-67-7
Octamethylcyclotetrasiloxane	0.5	556-67-2

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 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 : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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.

Section 4. First aid measures

Skin contact : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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 serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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 : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

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. Do not breathe 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.

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). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 : 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. Store locked up. 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 (OSHA United States)

Ingredient name	Exposure limits
Amorphous Silica	**NIOSH REL (United States, 10/2016).** TWA: 6 mg/m³ 10 hours.
Middle Petroleum Distillates	**NIOSH REL (United States, 10/2016).** TWA: 5 mg/m³ 10 hours. Form: Mist STEL: 10 mg/m³ 15 minutes. Form: Mist
Ethyl Triacetoxysilane	None.
Methyl Triacetoxysilane	None.
Acetic Acid	**ACGIH TLV (United States, 3/2016).** TWA: 10 ppm 8 hours. TWA: 25 mg/m³ 8 hours. STEL: 15 ppm 15 minutes. STEL: 37 mg/m³ 15 minutes. **NIOSH REL (United States, 10/2016).** TWA: 10 ppm 10 hours. TWA: 25 mg/m³ 10 hours. STEL: 15 ppm 15 minutes. STEL: 37 mg/m³ 15 minutes. **OSHA PEL (United States, 6/2016).** TWA: 10 ppm 8 hours. TWA: 25 mg/m³ 8 hours.
Titanium Dioxide	**ACGIH TLV (United States, 3/2016).** TWA: 10 mg/m³ 8 hours. **OSHA PEL (United States, 6/2016).** TWA: 15 mg/m³ 8 hours. Form: Total dust
Octamethylcyclotetrasiloxane	None.

Occupational exposure limits (Canada)

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Middle Petroleum Distillates	**CA Alberta Provincial (Canada, 4/2009).** 8 hrs OEL: 5 mg/m³ 8 hours. Form: Mist 15 min OEL: 10 mg/m³ 15 minutes. Form: Mist **CA Québec Provincial (Canada, 1/2014).** TWAEV: 5 mg/m³ 8 hours. Form: mist STEV: 10 mg/m³ 15 minutes. Form: mist
Acetic Acid	**CA Alberta Provincial (Canada, 4/2009).** 8 hrs OEL: 10 ppm 8 hours. 8 hrs OEL: 25 mg/m³ 8 hours. 15 min OEL: 37 mg/m³ 15 minutes. 15 min OEL: 15 ppm 15 minutes. **CA British Columbia Provincial (Canada, 7/2016).** TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. **CA Ontario Provincial (Canada, 7/2015).** TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. **CA Québec Provincial (Canada, 1/2014).** TWAEV: 10 ppm 8 hours. TWAEV: 25 mg/m³ 8 hours. STEV: 15 ppm 15 minutes. STEV: 37 mg/m³ 15 minutes. **CA Saskatchewan Provincial (Canada, 7/2013).** STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.

Occupational exposure limits (Mexico)

Ingredient name	Exposure limits
Middle Petroleum Distillates	**NOM-010-STPS-2014 (Mexico, 4/2016).** TWA: 5 mg/m³ 8 hours. Form: mist
Acetic Acid	**NOM-010-STPS-2014 (Mexico, 4/2016).** TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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.

Section 8. Exposure controls/personal protection

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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. 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.

Color : Not available.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : 117°C (242.6°F)

Flash point : Closed cup: >93.3°C (>199.9°F) [Pensky-Martens Closed Cup]

Evaporation rate : 0.97 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 5.4%
Upper: 19.3%

Vapor pressure : 1.5 kPa (11 mm Hg) [at 20°C]

Vapor density : 2.07 [Air = 1]

Relative density : 1.06

Solubility : Not available.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): >0.205 cm^2/s (>20.5 cSt)

Molecular weight : Not applicable.

Aerosol product

Heat of combustion : 5.139 kJ/g

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

Product/ingredient name	Result	Species	Dose	Exposure
Methyl Triacetoxysilane	LD50 Oral	Rat	2060 mg/kg	-
Acetic Acid	LC50 Inhalation Vapor	Rat	11000 mg/m³	4 hours
	LD50 Dermal	Rabbit	1060 mg/kg	-
	LD50 Oral	Rat	3310 mg/kg	-
Octamethylcyclotetrasiloxane	LC50 Inhalation Vapor	Rat	36 g/m³	4 hours
	LD50 Dermal	Rat	1770 mg/kg	-
	LD50 Oral	Rat	1540 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Amorphous Silica	Eyes - Mild irritant	Rabbit	-	24 hours 25 milligrams	-
Acetic Acid	Eyes - Mild irritant	Rabbit	-	0.5 minutes 5 milligrams	-
	Skin - Mild irritant	Human	-	24 hours 50 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 milligrams	-
	Skin - Severe irritant	Rabbit	-	525 milligrams	-
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300 Micrograms Intermittent	-
Octamethylcyclotetrasiloxane	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Section 11. Toxicological information

Classification

Product/ingredient name	OSHA	IARC	NTP
Amorphous Silica	-	3	-
Titanium Dioxide	-	2B	-

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

Name	Result
Middle Petroleum Distillates	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

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
watering
redness

Inhalation : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
reduced fetal weight
increase in fetal deaths
skeletal malformations

Ingestion : Adverse symptoms may include the following:
stomach pains
reduced fetal weight
increase in fetal deaths
skeletal malformations

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 : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

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 : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral Dermal Inhalation (vapors)	6595.9 mg/kg 32302.1 mg/kg 335.2 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Acetic Acid	Acute EC50 73400 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 65000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 32 mg/l Marine water	Crustaceans - Artemia salina	48 hours
	Acute LC50 75000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
Octamethylcyclotetrasiloxane	Chronic NOEC 1.7 to 15 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Chronic NOEC 4.4 µg/l Fresh water	Fish - Oncorhynchus mykiss - Egg	93 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Acetic Acid	-	3.16	low
Octamethylcyclotetrasiloxane	-	13400	high

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. 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

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	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.
Additional information	-	-	-	-	-

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Proper shipping name : Not available.

Ship type : Not available.

Pollution category : Not available.

Section 15. Regulatory information

SARA 313

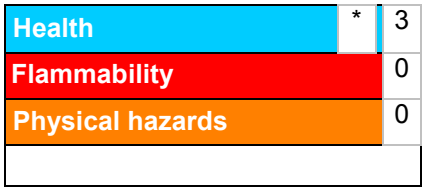
SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16. Other information

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



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.

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.

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 1B	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION (Fertility) - Category 2	Calculation method

History

Date of printing : 9/5/2017

Date of issue/Date of revision : 9/5/2017

Date of previous issue : 7/26/2016

Version : 4

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

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by Sherwin-Williams, including but not limited to the incorporation of non Sherwin-Williams products or the use or addition of products in proportions not specified by Sherwin-Williams. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use

Section 16. Other information

of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.