Safety Data Sheet



Revision Number: 007.1

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1. PRODUCT AND COMPANY IDENTIFICATION

 Product name:
 Loctite 545 Thread Sealant

 Product type:
 Anaerobic Sealant

 Restriction of Use:
 None identified

 Company address:
 Henkel Corporation

 One Henkel Way
 Rocky Hill, Connecticut 06067

IDH number:492145Item number:37482Region:United StatesContact information:Telephone:(860) 571-5100MEDICAL EMERGENCYPhone:Poison Control Center1-877-671-4608 (toll free) or 1-303-592-1711TRANSPORT EMERGENCYPhone:CHEMTREC1-800-424-9300 (toll free) or 1-703-527-3887Internet:www.henkelna.com

2. HAZARDS IDENTIFICATION

	EMERGENCY OVERVIEW		
WARNING:	CAUSES SKIN IRRITATION.		
	MAY CAUSE AN ALLERGIC SKIN REACTION.		
	CAUSES SERIOUS EYE IRRITATION.		

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



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 eye and face protection. 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

	Hazardous Component(s)	CAS Number	Percentage*
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Polyglycoldioctanoate	Proprietary	30 - 60	1
Polyglycol dimethacrylate	Proprietary	10 - 30	
2-Hydroxyethyl methacrylate	868-77-9	10 - 30	
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5	
Cumene hydroperoxide	80-15-9	1 - 5	
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1	
Cumene	98-82-8	0.1 - 1	
Methacrylic acid	79-41-4	0.1 - 1	

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4	I. 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). Remov contaminated clothing and footwear. Wash clothing before reuse. Get medic attention.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 18 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. 1	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 a 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. Phenolics.

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 ($32^{\circ}F$) and $32^{\circ}C$ ($89.6^{\circ}F$) 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

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
Polyglycoldioctanoate	None	None	None	None
Polyglycol dimethacrylate	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
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) TWA (SKIN)	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Methacrylic acid	20 ppm TWA	None	None	None

Engineering controls:

Respiratory protection:

Eye/face protection:

Skin protection:

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

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

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.

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

Liquid

Physical state: Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Boeiling point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Evaporation rate:

Purple mild Not available. Not applicable $< 5 \text{ mm hg } (27 \ ^{\circ}C \ (80.6 \ ^{\circ}F))$ $> 149 \ ^{\circ}C \ (> 300.2 \ ^{\circ}F)$ Not available. 1.02 Not available. $> 93.3 \ ^{\circ}C \ (> 199.94 \ ^{\circ}F)$ Tagliabue closed cup Not available. Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature: Slight Not available. 1.99 %; 19.01 g/l Not available. 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 th presence of incompatible materials.		
Hazardous decomposition products:	Oxides of carbon. Oxides of sulfur. Oxides of nitrogen. Phenolics. Irritating organic vapours		
Incompatible materials:	Strong oxidizing agents. Reducing agents. Acids. Bases. Rust. Zinc. Aluminum. Iron. Copp Alkalis. Aldehydes. Amines. Free radical initiators. Peroxides. Strong oxidizing agents. Reducing agents. Acids. Bases. Rust. Zinc. Aluminum. Iron. copper Alkalis. Aldehydes. Amines. Free radical initiators. Peroxides.		
Reactivity:	Not available.		
Conditions to avoid:	Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away fron 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 serious eye irritation.
Ingestion:	May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Polyglycoldioctanoate	None	Irritant	
Polyglycol dimethacrylate	None	Allergen, Irritant	
2-Hydroxyethyl methacrylate	Oral LD50 (RAT) = 11.2 g/kg Oral LD50 (RAT) = 5,050 mg/kg	Irritant, Allergen	
Silica, amorphous, fumed, crystal-free	None	Nuisance dust	
Cumene hydroperoxide	None	Allergen, Central nervous system, Corrosive, Irritant, Mutagen	
1-Acetyl-2-phenylhydrazine	None	Allergen, Blood, Kidney, Mutagen, 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	
Methacrylic acid	Oral LD50 (RABBIT) = 1,200 mg/kg Oral LD50 (RAT) = 1,060 mg/kg Oral LD50 (RAT) = 2,224 mg/kg Dermal LD50 (RABBIT) = 500 mg/kg Inhalation LC50 (RAT, 4 h) = 7.1 mg/l	Corrosive, Irritant, Allergen	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyglycoldioctanoate	No	No	No
Polyglycol dimethacrylate	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Cumene hydroperoxide	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	No
Methacrylic acid	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 substances, liquid, n.o.s.
Hazard class or division:	9
Identification number:	UN 3082
Packing group:	III
DOT Hazardous Substance(s):	alpha,alpha-Dimethylbenzylhydroperoxide

United States Regulatory Information	REGULATORY INFORMATION
Water Transportation (IMO/IMDG) Proper shipping name: Hazard class or division: Identification number: Packing group:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9 UN 3082 III
International Air Transportation (ICAO/IA Proper shipping name: Hazard class or division: Identification number: Packing group:	 FA) Environmentally hazardous substance, liquid, n.o.s. 9 UN 3082 III

All components are listed or are exempt from listing on the Toxic Substances Control Act TSCA 8 (b) Inventory Status: 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). 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:** All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format. 11

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