

Revision Number: 004.0 Issue date: 08/28/2014

1. PRODUCT AND COMPANY IDENTIFICATION

LOCTITE® 5188™ FLANGE SEALANT IDH number: Product name: 1241991 Product type: Anaerobic Item number: 1241991 Restriction of Use: Region: None identified **United States**

Company address: Henkel Corporation

One Henkel Way

Rocky Hill, Connecticut 06067

WARNING:

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

Contact information:

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW 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

PICTOGRAM(S)



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.

IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for Response:

several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical

attention. Take off contaminated clothing.

Not prescribed Storage:

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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Polyurethane methacrylate	Proprietary	30 - 60
High boiling methacrylate	Proprietary	10 - 30
2-Hydroxyethyl methacrylate	868-77-9	5 - 10
2-Phenoxyethyl acrylate	48145-04-6	5 - 10
Methacrylate ester	Proprietary	5 - 10
Ethene, homopolymer	9002-88-4	5 - 10
Ethene, tetrafluoro-, homopolymer	9002-84-0	1 - 5
Cumene hydroperoxide	80-15-9	1 - 5
Acrylic acid	79-10-7	0.1 - 1
Polyglycol dimethacrylate	Proprietary	0.1 - 1
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1
Ethylene glycol	107-21-1	0.1 - 1
Hydroxyalkyl methacrylate	Proprietary	0.1 - 1
Cumene	98-82-8	0.1 - 1
Adhesion Promoter	Proprietary	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 clothes. 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. 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.

Uncontrolled polymerization may occur at high temperatures resulting in

explosions or rupture of storage containers. In case of fire, keep containers

cool with water spray.

Hazardous combustion products: Oxides of carbon. 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 cleanup. 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.

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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 at or below 21 °C (69.8 °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
Polyurethane methacrylate	None	None	None	None
High boiling methacrylate	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
2-Phenoxyethyl acrylate	None	None	None	None
Methacrylate ester	None	None	None	None
Ethene, homopolymer	None	None	None	None
Ethene, tetrafluoro-, homopolymer	None	None	None	10 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.
Cumene hydroperoxide	None	None	1 ppm (6 mg/m3) TWA (SKIN)	None
Acrylic acid	2 ppm TWA (SKIN)	None	None	1 ppm TWA 3 ppm STEL (SKIN)
Polyglycol dimethacrylate	None	None	None	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
Ethylene glycol	100 mg/m3 Ceiling Aerosol.	None	None	None
Hydroxyalkyl methacrylate	None	None	None	1 ppm TWA 3 ppm STEL
Cumene	50 ppm TWA	50 ppm (245 mg/m3) PEL (SKIN)	None	None
Adhesion Promoter	20 ppm TWA	None	None	None

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

exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator with an organic vapor cartridge.

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, Butyl-rubber, or nitrile-

rubber gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:LiquidColor:RedOdor:Mild

Odor threshold:
pH:
Not available.
Not available.
Vapor pressure:
Not available.
Boiling point/range:
Not available.
Melting point/ range:
Not available.
Specific gravity:
1.13

Vapor density: Not available.

Flash point: $> 93 \, ^{\circ}\text{C} \ (> 199.4 \, ^{\circ}\text{F})$; Estimated

Flammable/Explosive limits - lower: Not available. Flammable/Explosive limits - upper: Not available. Autoignition temperature: Not available. Evaporation rate: Not available. Solubility in water: Insoluble Partition coefficient (n-octanol/water): Not available. **VOC** content: 0.72 % 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:

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Oxides of carbon. Irritating organic vapours.

Incompatible materials: Strong oxidizing agents. Water, amines, alkalis and alcohols. Acids. Reducing agents. Oxygen

scavengers. Other polymerization initiators. Heavy metals. Bases. Free radical initiators.

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.

Causes serious eye irritation. Eye contact:

Ingestion: May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Polyurethane methacrylate	None	No Records	
High boiling methacrylate	None	Irritant, Allergen	
2-Hydroxyethyl methacrylate	Oral LD50 (RAT) = 11.2 g/kg Oral LD50 (RAT) = 5,050 mg/kg	Irritant, Allergen	
2-Phenoxyethyl acrylate	None	Irritant, Allergen	
Methacrylate ester	None	Irritant, Allergen	
Ethene, homopolymer	None	No Target Organs	
Ethene, tetrafluoro-, homopolymer	None	No Target Organs	
Cumene hydroperoxide	None	Allergen, Central nervous system, Corrosive, Irritant, Mutagen	
Acrylic acid	Oral LD50 (RAT) = 33.5 mg/kg Oral LD50 (RAT) = 2.5 g/kg Oral LD50 (RAT) = 193 mg/kg Oral LD50 (RAT) = 1,250 mg/kg Inhalation LC50 (RAT, 4 h) = 1,200 mg/l	Allergen, Corrosive, Irritant, Kidney, Liver	
Polyglycol dimethacrylate	None	Allergen, Irritant	
1-Acetyl-2-phenylhydrazine	None	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity	
Ethylene glycol	Oral LD50 (RAT) = 5.89 g/kg Dermal LD50 (RABBIT) = 9,530 mg/kg	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic	
Hydroxyalkyl methacrylate	None	Irritant, Allergen	
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	
Adhesion Promoter	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)
Polyurethane methacrylate	No	No	No
High boiling methacrylate	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
2-Phenoxyethyl acrylate	No	No	No
Methacrylate ester	No	No	No
Ethene, homopolymer	No	No	No
Ethene, tetrafluoro-, homopolymer	No	No	No
Cumene hydroperoxide	No	No	No
Acrylic acid	No	No	No
Polyglycol dimethacrylate	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Ethylene glycol	No	No	No
Hydroxyalkyl methacrylate	No	No	No
Cumene	No	Group 2B	No
Adhesion Promoter	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

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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: Not regulated Hazard class or division: None Identification number: None Packing group: None

International Air Transportation (ICAO/IATA)

Not regulated Proper shipping name: 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

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: Ethene, tetrafluoro-, homopolymer (CAS# 9002-84-0).

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). 2-Phenoxyethyl acrylate (CAS# 48145-04-6). Aromatic methacrylate (CAS#

10595-06-9). Cumene hydroperoxide (CAS# 80-15-9). Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)

CERCLA Reportable quantity:

This product contains a chemical known in the State of California to cause cancer. This California Proposition 65:

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: 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: New Safety Data Sheet format.

Product name: LOCTITE® 5188™ FLANGE SEALANT IDH number: 1241991

Prepared by: Sheila Gines, Regulatory Affairs Specialist

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