



Revision Number: 002.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE® 5188™ FLANGE SEALANT	IDH number:	1241991
Product type:	Anaerobic	Item number:	1241991
		Region:	United States
Company address:	Contact information:		
Henkel Corporation	Telephone: 860.571.5100		
One Henkel Way	Emergency telephone: 860.571.5100		
Rocky Hill, Connecticut 06067	Internet: www.henkelna.com		

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Liquid	HMIS:	
Color:	Red	HEALTH:	*2
Odor:	Mild	FLAMMABILITY:	1
		PHYSICAL HAZARD:	1
		Personal Protection:	See MSDS Section 8

WARNING: CAUSES EYE AND SKIN IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

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

Potential Health Effects

Inhalation:	May cause respiratory tract irritation.
Skin contact:	Causes skin irritation. May cause allergic skin reaction. May be harmful if absorbed through skin. Rash.
Eye contact:	Causes eye irritation. Liquid, aerosols or vapor are irritating and can cause tearing, reddening and swelling.
Ingestion:	May be harmful if swallowed.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders. Skin allergies.

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

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Polyurethane methacrylate	Proprietary	30 - 60
High boiling methacrylate	7534-94-3	10 - 30
Amorphous fumed silica	68611-44-9	5 - 10
2-Hydroxyethyl methacrylate	868-77-9	5 - 10
2-Phenoxyethyl acrylate	48145-04-6	5 - 10
Aromatic methacrylate	10595-06-9	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	1 - 5
1-Acetyl-2-phenylhydrazine	114-83-0	0.1 - 1
Ethylene glycol	107-21-1	0.1 - 1

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
Skin contact:	Wash with soap and water. Remove contaminated clothes. Wash clothing before reuse. If symptoms develop and persist, get medical attention.
Eye contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.
Ingestion:	Do not induce vomiting. Keep individual calm. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 93 °C (> 199.4 °F) ; Estimated
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.
Unusual fire or explosion hazards:	Not available
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:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Store in a partly filled, closed container until disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling.

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 components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Polyurethane methacrylate	None	None	None	None
High boiling methacrylate	None	None	None	None
Amorphous fumed silica	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
2-Phenoxyethyl acrylate	None	None	None	None
Aromatic methacrylate	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)
1-Acetyl-2-phenylhydrazine	None	None	None	None
Ethylene glycol	100 mg/m3 Ceiling Aerosol.	None	None	None

Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

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.

Skin protection: Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Red
Odor:	Mild
Odor threshold:	Not available
pH:	Not available
Vapor pressure:	Not available
Boiling point/range:	Not available
Melting point/ range:	Not available
Vapor density:	Not available
Flash point:	> 93 °C (> 199.4 °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 %

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous reactions: Will not occur.

Hazardous decomposition products: 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.

Conditions to avoid: See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Polyurethane methacrylate	No	No	No
High boiling methacrylate	No	No	No
Amorphous fumed silica	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
2-Phenoxyethyl acrylate	No	No	No
Aromatic methacrylate	No	No	No
Ethene, homopolymer	No	No	No
Ethene, tetrafluoro-, homopolymer	No	No	No
Cumene hydroperoxide	No	No	No
Acrylic acid	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
Ethylene glycol	No	No	No

Hazardous components	Health Effects/Target Organs
Polyurethane methacrylate	No Data
High boiling methacrylate	Irritant, Allergen
Amorphous fumed silica	No Target Organs
2-Hydroxyethyl methacrylate	Irritant, Allergen
2-Phenoxyethyl acrylate	Irritant, Allergen
Aromatic methacrylate	Irritant, Allergen
Ethene, homopolymer	No Target Organs
Ethene, tetrafluoro-, homopolymer	No Target Organs
Cumene hydroperoxide	Allergen, Central nervous system, Corrosive, Irritant, Mutagen
Acrylic acid	Allergen, Corrosive, Irritant, Kidney, Liver
1-Acetyl-2-phenylhydrazine	Allergen, Blood, Kidney, Mutagen, Some evidence of carcinogenicity
Ethylene glycol	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Irritant, Kidney, Liver, Metabolic

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

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

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 minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health
CERCLA/SARA 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). Acrylic acid (CAS# 79-10-7).
CERCLA Reportable quantity: Cumene hydroperoxide (CAS# 80-15-9) 10 lbs. (4.54 kg)
Saccharin (CAS# 81-07-2) 100 lbs. (45.4 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: 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.
WHMIS hazard class: D.2.A, D.2.B

16. OTHER INFORMATION

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

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