



Revision Number: 005.1

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**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name:** LOCTITE HI FL GM FS known as High Flex Form-In-Place Gasket  
**IDH number:** 555354  
**Product type:** Anaerobic Adhesive  
**Item number:** 38657  
**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**

**EMERGENCY OVERVIEW**

**WARNING:** CAUSES SKIN IRRITATION.  
 MAY CAUSE AN ALLERGIC SKIN REACTION.  
 CAUSES SERIOUS EYE IRRITATION.  
 MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
SKIN IRRITATION	2
EYE IRRITATION	2A
SKIN SENSITIZATION	1
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

**PICTOGRAM(S)**



**Precautionary Statements**

**Prevention:** Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. 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 INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison control center or physician 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:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**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*
Dimethacrylate terminated urethane polyester	Unknown	30 - 60
2-Hydroxy-3-phenoxypropyl methacrylate	16926-87-7	10 - 30
Polyurethane methacrylate resin	Proprietary	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
2-Hydroxyethyl methacrylate	868-77-9	0.1 - 1
Ethylene glycol	107-21-1	0.1 - 1
Polyglycol dimethacrylate	Proprietary	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

<b>Inhalation:</b>	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Skin contact:</b>	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Wash clothing before reuse. Get medical attention.
<b>Eye contact:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion:</b>	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
<b>Symptoms:</b>	See Section 11.

### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
<b>Unusual fire or explosion hazards:</b>	Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers.
<b>Hazardous combustion products:</b>	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.

<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
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**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 38 °C (100.4 °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
Dimethacrylate terminated urethane polyester	None	None	None	None
2-Hydroxy-3-phenoxypropyl methacrylate	None	None	None	None
Polyurethane methacrylate resin	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) TWA (SKIN)	None
1-Acetyl-2-phenylhydrazine	None	None	None	None
2-Hydroxyethyl methacrylate	None	None	None	3 ppm Ceiling
Ethylene glycol	100 mg/m3 Ceiling Aerosol.	None	None	None
Polyglycol dimethacrylate	None	None	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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Gel
<b>Color:</b>	Blue
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	< 5 mm hg (80 °F (26.7 °C))
<b>Boiling point/range:</b>	> 300 °F (> 148.9 °C)
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.0961
<b>Vapor density:</b>	Not available.
<b>Flash point:</b>	> 93.3 °C (> 199.94 °F) Tagliabue closed cup
<b>Flammable/Explosive limits - lower:</b>	Not available.
<b>Flammable/Explosive limits - upper:</b>	Not available.
<b>Autoignition temperature:</b>	Not available.
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Slight
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	8.17 %; 89.6 g/l EPA Method 24
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under normal conditions of storage and use.
<b>Hazardous reactions:</b>	None under normal processing. Polymerization may occur at elevated temperature or in the presence of incompatible materials.
<b>Hazardous decomposition products:</b>	Oxides of nitrogen. Oxides of sulfur. Oxides of carbon. Irritating organic vapours.
<b>Incompatible materials:</b>	Free radical initiators. Strong oxidizing agents. Reducing agents. Alkalis. Rust. Acids. copper Iron.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Elevated temperatures. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

## 11. TOXICOLOGICAL INFORMATION

<b>Relevant routes of exposure:</b>	Not available.
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**Potential Health Effects/Symptoms**

**Inhalation:** Not available.  
**Skin contact:** Not available.  
**Eye contact:** Not available.  
**Ingestion:** Not available.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Dimethacrylate terminated urethane polyester	None	Irritant, Allergen
2-Hydroxy-3-phenoxypropyl methacrylate	None	Irritant, Allergen
Polyurethane methacrylate resin	None	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
2-Hydroxyethyl methacrylate	Oral LD50 (RAT) = 11.2 g/kg Oral LD50 (RAT) = 5,050 mg/kg	Irritant, Allergen
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
Polyglycol dimethacrylate	None	Allergen, Irritant
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)
Dimethacrylate terminated urethane polyester	No	No	No
2-Hydroxy-3-phenoxypropyl methacrylate	No	No	No
Polyurethane methacrylate resin	No	No	No
Silica, amorphous, fumed, crystal-free	No	No	No
Cumene hydroperoxide	No	No	No
1-Acetyl-2-phenylhydrazine	No	No	No
2-Hydroxyethyl methacrylate	No	No	No
Ethylene glycol	No	No	No
Polyglycol dimethacrylate	No	No	No
Cumene	Reasonably Anticipated to be a Human Carcinogen.	Group 2B	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:** 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 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/NDL 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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