

Material Safety Data Sheet



Revision Number: 005.1

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE® 587™ FLANGE SEALANT	IDH number:	234592
	Performance RTV Silicone Gasket		
Product type:	Silicone Sealant	Item number:	58791
		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:	Paste	HMIS:	
Color:	Blue	HEALTH:	*2
Odor:	Mild, Petroleum	FLAMMABILITY:	1
		PHYSICAL HAZARD:	0
		Personal Protection:	See MSDS Section 8
WARNING:	PROLONGED OR REPEATED CONTACT WITH UNCURED SEALANT MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT WITH UNCURED SEALANT MAY CAUSE BURNS TO SKIN AND EYES. REPEATED OR PROLONGED CONTACT MAY CAUSE ALLERGIC SKIN REACTION.		

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation:	The silane is a skin and eye irritant and prolonged contact may cause eye and skin burns. The low concentration makes such overexposure unlikely and minimizes its affect on health and safety. When heated to temperatures exceeding 300° F (150° C) in the presence of air, silicones may form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate the eyes, nose and throat. Safe handling conditions may be maintained by keeping formaldehyde vapor concentrations below the OSHA permissible limit.
Skin contact:	Prolonged or repeated skin contact may cause skin irritation or allergic skin sensitization reaction. Possible burns to skin.
Eye contact:	Vapors may irritate eyes. Contact with eyes will cause irritation.
Ingestion:	Not expected under normal conditions of use. May be harmful if swallowed.

Existing conditions aggravated by exposure: Skin disorders.

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	%
Siloxanes and Silicones, di-Me, hydroxy-terminated	70131-67-8	30 - 60
Limestone	1317-65-3	30 - 60
Butan-2-one O,O',O''-(vinylsilyldiyl)trioxime	2224-33-1	1 - 5
Aluminum	7429-90-5	0.1 - 1
3-(Trimethoxysilyl)propylamine	13822-56-5	0.1 - 1
White mineral oil (petroleum), highly refined	8042-47-5	0.1 - 1
Butanone oxime	96-29-7	0.1 - 1
Quartz (SiO ₂)	14808-60-7	0.1 - 1

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If symptoms persist, seek medical advice.
Skin contact:	Wipe off paste with paper towel or cloth. Wash with soap and water. If skin irritation persists, call a physician.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
Ingestion:	Do not induce vomiting. If symptoms develop and persist, get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	> 93 °C (> 199.4 °F) Tagliabue closed cup
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Dry chemical. Foam. Carbon dioxide.
Special firefighting procedures:	None
Unusual fire or explosion hazards:	None
Hazardous combustion products:	Oxides of carbon. Oxides of silicon. Formaldehyde.

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:	Scrape up as much material as possible. Maintain good ventilation for large spills. Place scrap material in a well ventilated area and allow to cure to rubber.

7. HANDLING AND STORAGE

Handling:	Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not handle contact lenses until all sealant has been removed from hands. Residual sealant may transfer to lenses and cause eye irritation.
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Storage:

For safe storage, store at or below 32 °C (89.6 °F)
Keep container closed.

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
Siloxanes and Silicones, di-Me, hydroxy-terminated	None	None	None	None
Limestone	10 mg/m3 TWA Total dust.	5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust.	None	None
Butan-2-one O,O',O''-(vinylsilyldiyl)trioxime	None	None	None	None
Aluminum	1 mg/m3 TWA Respirable fraction.	15 mg/m3 TWA (as Al) Total dust. 5 mg/m3 TWA (as Al) Respirable dust.	None	None
3-(Trimethoxysilyl)propylamine	None	None	None	None
White mineral oil (petroleum), highly refined	5 mg/m3 TWA Mist. 10 mg/m3 STEL Mist.	5 mg/m3 TWA mist	None	None
Butanone oxime	None	None	10 ppm (36 mg/m3) TWA (Skin sensitizer)	None
Quartz (SiO ₂)	0.025 mg/m3 TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m3 TWA Respirable. 0.3 mg/m3 TWA Total dust.	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 if the potential to exceed established exposure limits exists. Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists.

Eye/face protection:

Safety goggles or safety glasses with side shields. Safety goggles or safety glasses with side shields.

Skin protection:

Chemical resistant, impermeable gloves. Impervious clothing. Chemical resistant, impermeable gloves. Impervious clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Blue
Odor:	Mild, Petroleum
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	< 5 mm hg (20 °C (68°F))
Boiling point/range:	Not available
Melting point/ range:	Not available
Specific gravity:	1.31 at 20 °C (68°F)
Vapor density:	Not available
Flash point:	> 93 °C (> 199.4 °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:	Polymerises in presence of water.
Partition coefficient (n-octanol/water):	Not available
VOC content:	3.33 %; 43.09 g/l

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Oxides of carbon. Oxides of silicon. Formaldehyde Methyl ethyl ketoxime formed during cure.
Incompatible materials:	Acids. Bases. Oxidizing agents. Polymerizes on contact with water.
Conditions to avoid:	Moisture.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Siloxanes and Silicones, di-Me, hydroxy-terminated	No	No	No
Limestone	No	No	No
Butan-2-one O,O',O''-(vinylsilyldiyl)trioxime	No	No	No
Aluminum	No	No	No
3-(Trimethoxysilyl)propylamine	No	No	No
White mineral oil (petroleum), highly refined	No	No	No
Butanone oxime	No	No	No
Quartz (SiO ₂)	Known carcinogen.	Group 1	No

Hazardous components	Health Effects/Target Organs
Siloxanes and Silicones, di-Me, hydroxy-terminated	No Target Organs
Limestone	Nuisance dust
Butan-2-one O,O',O''-(vinylsilyldiyl)trioxime	Irritant, Allergen
Aluminum	Central nervous system, Irritant, Lung
3-(Trimethoxysilyl)propylamine	Irritant, Allergen
White mineral oil (petroleum), highly refined	Irritant
Butanone oxime	Allergen, Blood, Central nervous system, Eyes, Irritant, Some evidence of carcinogenicity
Quartz (SiO ₂)	Immune system, Lung, Some evidence of carcinogenicity

12. ECOLOGICAL INFORMATION

Ecological information:	No specific studies have been conducted by Henkel on the ecotoxicity or environmental fate of this material; however, commonly available data on the material indicate that uncontrolled releases to soil, ground water, or surface waters could entail acute and/or chronic ecological effects, depending on the quantity and concentration of such releases. Releases of volatile components to the atmosphere are not believed to entail significant ecological consequences provided such releases are within the exposure levels set forth in this document. Accordingly, all appropriate measures should be taken to avoid uncontrolled releases to the environment, and any spills or other uncontrolled releases which may occur should be contained and cleaned up immediately in accordance with Section 6.
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13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Cured rubber can be incinerated or landfilled following EPA and local regulations.

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/MDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None
Exceptions: 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: None above reporting de minimus
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
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.

Prepared by: Lou Fabrizio, Regulatory Affairs Specialist

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