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## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name:</b>	<b>LOCTITE SI 5999 known as 5999 GREY</b>	<b>IDH number:</b>	231230
<b>Product type:</b>	Silicone	<b>Item number:</b>	21744
<b>Restriction of Use:</b>	None identified	<b>Region:</b>	United States
<b>Company address:</b>	<b>Contact information:</b>		
Henkel Corporation	Telephone: +1 (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	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:** MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.  
SUSPECTED OF CAUSING CANCER.  
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR  
REPEATED EXPOSURE.

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

### PICTOGRAM(S)



### Precautionary Statements

<b>Prevention:</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust or fumes. Wash affected area thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection.
<b>Response:</b>	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 exposed or concerned: Get medical attention. If skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Wash contaminated clothing before reuse.
<b>Storage:</b>	Store locked up.
<b>Disposal:</b>	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*
Calcium carbonate	471-34-1	20 - 30
Butan-2-one O,O',O''-(vinylsilyldiyl)trioxime	2224-33-1	5 - 10
Silicon dioxide	7631-86-9	1 - 5
Octadecanoic acid	57-11-4	0.1 - 1
Aluminum	7429-90-5	0.1 - 1
Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime	34206-40-1	0.1 - 1
Butanone oxime	96-29-7	1 - 5

\* Exact percentages may vary or are 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>	Wipe off paste with paper towel or cloth. Wash with soap and water. If skin irritation persists, call a physician.
<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. 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>	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. Prevent inhalation of fumes and gases.
<b>Unusual fire or explosion hazards:</b>	None
<b>Hazardous combustion products:</b>	Oxides of carbon. Oxides of silicon. Formaldehyde. 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.
<b>Clean-up methods:</b>	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. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

## 7. HANDLING AND STORAGE

### Handling:

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

### Storage:

For safe storage, store between 8 °C (46.4 °F) and 28 °C (82.4 °F) Store in a dry area below 90° F. Keep container closed.

## 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
Calcium carbonate	10 mg/m <sup>3</sup> TWA Total dust.	5 mg/m <sup>3</sup> PEL Respirable fraction. 15 mg/m <sup>3</sup> PEL Total dust.	None	None
Butan-2-one O,O',O'',O'''-(vinylsilyldiylidene)trioxime	None	None	None	None
Silicon dioxide	6 mg/m <sup>3</sup> TWA	20 MPPCF TWA 0.8 mg/m <sup>3</sup> TWA	None	3 mg/m <sup>3</sup> TWA Respirable fraction.
Octadecanoic acid	10 mg/m <sup>3</sup> TWA Inhalable fraction. 3 mg/m <sup>3</sup> TWA Respirable fraction.	None	None	None
Aluminum	1 mg/m <sup>3</sup> TWA Respirable fraction.	15 mg/m <sup>3</sup> PEL (as Al) Total dust. 5 mg/m <sup>3</sup> PEL (as Al) Respirable fraction. 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 5 mg/m <sup>3</sup> TWA Respirable fraction. 15 mg/m <sup>3</sup> TWA Total dust.	None	None
Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime	None	None	None	None
Butanone oxime	None	None	10 ppm (36 mg/m <sup>3</sup> ) TWA (Skin sensitizer)	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). Use an organic vapor respirator for concentrations exceeding the Occupational Exposure Limit.

### Eye/face protection:

Safety goggles or safety glasses with side shields. 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. Permeation resistant gloves (butyl rubber, nitrile rubber, polyvinyl alcohol).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Gray
Odor:	Mild
Odor threshold:	Not available.
pH:	Not applicable
Vapor pressure:	< 5 mm hg
Boiling point/range:	Not applicable
Melting point/ range:	Not available.
Specific gravity:	1.5 at 20 °C (68°F)
Vapor density:	Heavier than air.
Flash point:	> 93 °C (> 199.4 °F)
Flammable/Explosive limits - lower:	Not applicable
Flammable/Explosive limits - upper:	Not applicable
Autoignition temperature:	Not available.
Flammability:	Not applicable
Evaporation rate:	Not available.
Solubility in water:	Polymerises in presence of water.
Partition coefficient (n-octanol/water):	Not available.
VOC content:	4.16 %; 59.55 g/l
Viscosity:	Not available.
Decomposition temperature:	Not available.

## 10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Hazardous reactions:	None under normal processing.
Hazardous decomposition products:	Formaldehyde. Methyl ethyl ketoxime formed during cure. Oxides of silicon. Oxides of carbon. Irritating fumes.
Incompatible materials:	Polymerizes on contact with water. Oxidizing agents. Acids and bases.
Reactivity:	Not available.
Conditions to avoid:	Moisture.

## 11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:	Skin, Inhalation, Eyes, Ingestion
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### Potential Health Effects/Symptoms

<b>Inhalation:</b>	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. Inhalation of vapors from uncured sealant may cause respiratory tract irritation.
<b>Skin contact:</b>	May cause skin irritation. May cause allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	Not expected under normal conditions of use. May cause gastrointestinal tract irritation if swallowed.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Calcium carbonate	Oral LD50 (Rat) = 6,450 mg/kg Oral LD50 (Mouse) = 6,450 mg/kg	Nuisance dust
Butan-2-one O,O',O''-(vinylsilyldiene)trioxime	None	Irritant, Allergen
Silicon dioxide	Oral LD50 (Rat) = > 22,500 mg/kg Oral LD50 (Mouse) = > 15,000 mg/kg	Nuisance dust
Octadecanoic acid	Oral LD50 (Rat) = 4.6 g/kg	Irritant
Aluminum	None	Central nervous system, Irritant, Lung
Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime	None	Irritant, Allergen
Butanone oxime	None	Allergen, Blood, Central nervous system, Eyes, Irritant, Some evidence of carcinogenicity

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Calcium carbonate	No	No	No
Butan-2-one O,O',O''-(vinylsilyldiene)trioxime	No	No	No
Silicon dioxide	No	No	No
Octadecanoic acid	No	No	No
Aluminum	No	No	No
Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime	No	No	No
Butanone oxime	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological information:** Not available.

### 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

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  
**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 minimis

**CERCLA/SARA Section 302 EHS:** None above reporting de minimis.  
**CERCLA/SARA Section 311/312:** Immediate Health, Delayed Health  
**CERCLA/SARA Section 313:** None above reporting de minimis.

**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/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: 2, 3, 11

**Prepared by:** Product Safety and Regulatory Affairs

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