



Revision Number: 006.1

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## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product name:** LOCTITE SI 596 RD known as  
**LOCTITE SUPERFLEX RED RTV 80ML**
**IDH number:** 135507  
**Product type:** Sealant

**Restriction of Use:** None identified

**Company address:**  
 Henkel Corporation  
 One Henkel Way  
 Rocky Hill, Connecticut 06067

**Item number:** 59630  
**Region:** United States  
**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](http://www.henkelna.com)

## 2. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**WARNING:** 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.

**Response:** 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 skin irritation or rash occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing.

**Storage:** Not prescribed

**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*
Distillates (petroleum), hydrotreated middle	64742-46-7	5 - 10
Silicon dioxide	7631-86-9	5 - 10
Silicone Resin	Proprietary	1 - 5
Diiron trioxide	1309-37-1	1 - 5
Substituted Silane	Proprietary	1 - 5
Acetic acid	64-19-7	0.1 - 1
Substituted silane	Proprietary	0.1 - 1

Hazardous Component(s)	CAS Number	Percentage*
Dimethyl siloxane, hydroxyterminated	70131-67-8	60 - 100
Distillates (petroleum), hydrotreated middle	64742-46-7	5 - 10
Silicon dioxide	7631-86-9	5 - 10
Siloxanes and Silicones, di-Me	63148-62-9	1 - 5
Diiron trioxide	1309-37-1	1 - 5
Methylsilanetriyl triacetate	4253-34-3	1 - 5
Triacetoxyethylsilane	17689-77-9	1 - 5
Acetic acid	64-19-7	0.1 - 1
Gamma-glycidoxypropyl trimethoxysilane	2530-83-8	0.1 - 1
Barium sulfate	7727-43-7	0.1 - 1
Silicic acid, ethyl ester	11099-06-2	0.1 - 1
Silicon dioxide	7631-86-9	0.1 - 1
Amorphous fumed silica	68611-44-9	0.1 - 1
Tetraethyl silicate	78-10-4	0 - 0.1
Ethanol	64-17-5	0 - 0.1
Chromium	7440-47-3	0 - 0.1
Nickel	7440-02-0	0 - 0.1
Methanol	67-56-1	0 - 0.1
Arsenic	7440-38-2	0 - 0.1

\* 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, 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. If eye irritation persists, consult a specialist.
<b>Ingestion:</b>	Do not induce vomiting. If a person feels unwell or symptoms of skin irritation appear, consult a physician.
<b>Symptoms:</b>	See Section 11.
<b>Notes to physician:</b>	Treat symptomatically.

#### 5. FIRE FIGHTING MEASURES

<b>Extinguishing media:</b>	Foam, dry chemical or carbon dioxide.
<b>Special firefighting procedures:</b>	None
<b>Unusual fire or explosion hazards:</b>	None

**Hazardous combustion products:**

Silica mist. Formaldehyde. Acrid smoke and fumes.

## **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:**

Maintain good ventilation for large spills. Store in a partly filled, closed container until disposal. Spilled material will solidify. Scrape up as much material as possible.

## **7. HANDLING AND STORAGE**

**Handling:**

Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.

**Storage:**

Keep container closed. Store in a dry area below 90° F.

**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
Distillates (petroleum), hydrotreated middle	5 mg/m <sup>3</sup> TWA Inhalable fraction.	5 mg/m <sup>3</sup> PEL Mist.	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.
Silicone Resin	None	None	None	None
Diiron trioxide	5 mg/m <sup>3</sup> TWA Respirable fraction.	10 mg/m <sup>3</sup> PEL Fume.	None	None
Substituted Silane	None	None	None	None
Acetic acid	15 ppm STEL 10 ppm TWA	10 ppm (25 mg/m <sup>3</sup> ) PEL	None	None
Substituted silane	None	None	None	None
Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Dimethyl siloxane, hydroxyterminated	None	None	None	None
Distillates (petroleum), hydrotreated middle	5 mg/m <sup>3</sup> TWA Inhalable fraction.	5 mg/m <sup>3</sup> PEL Mist.	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.
Siloxanes and Silicones, di-Me	None	None	None	None
Diiron trioxide	5 mg/m <sup>3</sup> TWA Respirable fraction.	10 mg/m <sup>3</sup> PEL Fume.	None	None
Methylsilanetriyl triacetate	None	None	None	None
Triacetoxyethylsilane	None	None	None	None
Acetic acid	15 ppm STEL 10 ppm TWA	10 ppm (25 mg/m <sup>3</sup> ) PEL	None	None
Gamma-glycidoxypropyl trimethoxysilane	None	None	None	None
Barium sulfate	5 mg/m <sup>3</sup> TWA Inhalable fraction.	5 mg/m <sup>3</sup> PEL Respirable fraction. 15 mg/m <sup>3</sup> PEL Total dust.	None	None
Silicic acid, ethyl ester	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.
Amorphous fumed silica	None	None	None	None
Tetraethyl silicate	10 ppm TWA	100 ppm (850 mg/m <sup>3</sup> ) PEL	None	None
Ethanol	1,000 ppm STEL	1,000 ppm (1,900 mg/m <sup>3</sup> ) PEL	None	None
Chromium	0.5 mg/m <sup>3</sup> TWA (as Cr)	1 mg/m <sup>3</sup> PEL (as Cr)	None	None
Nickel	1.5 mg/m <sup>3</sup> TWA Inhalable fraction.	1 mg/m <sup>3</sup> PEL (as Ni)	None	None
Methanol	200 ppm TWA (SKIN) 250 ppm STEL	200 ppm (260 mg/m <sup>3</sup> ) PEL	None	None
Arsenic	0.01 mg/m <sup>3</sup> TWA (as As)	0.01 mg/m <sup>3</sup> TWA 0.005 mg/m <sup>3</sup> OSHA_ACT	None	None

**Engineering controls:**

Use only with adequate ventilation.

**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.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid, Paste
<b>Color:</b>	Red
<b>Odor:</b>	Acetic acid
<b>Odor threshold:</b>	Not available.
<b>pH:</b>	Not applicable
<b>Vapor pressure:</b>	13 hPa (21 °C (69.8 °F))
<b>Boiling point/range:</b>	Not available.
<b>Melting point/ range:</b>	Not available.
<b>Specific gravity:</b>	1.01 at 20 °C (68°F)
<b>Vapor density:</b>	Heavier than air.
<b>Flash point:</b>	> 93 °C (> 199.4 °F)
<b>Flammable/Explosive limits - lower:</b>	4 % (acetic acid)
<b>Flammable/Explosive limits - upper:</b>	19.9 % (acetic acid)
<b>Autoignition temperature:</b>	Not available.
<b>Evaporation rate:</b>	Not available.
<b>Solubility in water:</b>	Not soluble. Polymerizes in presence of water.
<b>Solubility in water:</b>	Not determined
<b>Partition coefficient (n-octanol/water):</b>	Not available.
<b>VOC content:</b>	3.08 %; 32 g/l
<b>Viscosity:</b>	Not available.
<b>Decomposition temperature:</b>	Not available.

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable
<b>Hazardous reactions:</b>	Will not occur.
<b>Hazardous decomposition products:</b>	Acetic acid is liberated slowly upon contact with moisture. Formaldehyde.
<b>Incompatible materials:</b>	Acids. Water Bases. Oxidizing agents.
<b>Reactivity:</b>	Not available.
<b>Conditions to avoid:</b>	Exposure to moisture. Prolonged heating at temperatures above 150 °C.

## 11. TOXICOLOGICAL INFORMATION

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

### Potential Health Effects/Symptoms

<b>Inhalation:</b>	Acetic acid produced during cure may irritate eyes, nose and throat. 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.
<b>Skin contact:</b>	Causes skin irritation. May cause allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	Not expected to be harmful by ingestion.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Distillates (petroleum), hydrotreated middle	None	Irritant
Silicon dioxide	Oral LD50 (RAT) = > 22,500 mg/kg	Nuisance dust
Silicone Resin	None	Irritant
Diiron trioxide	None	Allergen, Cardiac, Central nervous system, Irritant, Kidney, Liver, Lung
Substituted Silane	None	Irritant, Allergen
Acetic acid	Oral LD50 (RABBIT) = 1,200 mg/kg Oral LD50 (RAT) = 3.53 g/kg Oral LD50 (RAT) = 3.31 g/kg Dermal LD50 (RABBIT) = 1,060 mg/kg Inhalation LC50 (RAT, 4 h) = 11.4 mg/l	Allergen, Corrosive, Eyes, Gastrointestinal, Immune system, Irritant, Kidney
Substituted silane	None	Allergen, Irritant

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Dimethyl siloxane, hydroxyterminated	None	No Target Organs
Distillates (petroleum), hydrotreated middle	None	Irritant
Silicon dioxide	Oral LD50 (RAT) = > 22,500 mg/kg	Nuisance dust
Siloxanes and Silicones, di-Me	None	Irritant
Diiron trioxide	None	Allergen, Cardiac, Central nervous system, Irritant, Kidney, Liver, Lung
Methylsilanetriyl triacetate	None	Irritant, Allergen
Triacetoxymethylsilane	None	No Target Organs
Acetic acid	Oral LD50 (RABBIT) = 1,200 mg/kg Oral LD50 (RAT) = 3.53 g/kg Oral LD50 (RAT) = 3.31 g/kg Dermal LD50 (RABBIT) = 1,060 mg/kg Inhalation LC50 (RAT, 4 h) = 11.4 mg/l	Allergen, Corrosive, Eyes, Gastrointestinal, Immune system, Irritant, Kidney
Gamma-glycidoxypropyl trimethoxysilane	None	Allergen, Irritant
Barium sulfate	None	Lung
Silicic acid, ethyl ester	None	No Target Organs
Silicon dioxide	Oral LD50 (RAT) = > 22,500 mg/kg	Nuisance dust
Amorphous fumed silica	None	No Target Organs
Tetraethyl silicate	None	Central nervous system, Irritant, Kidney, Liver, Lung
Ethanol	Oral LD50 (RAT) = 9.9 g/kg Oral LD50 (RAT) = 6.2 g/kg Oral LD50 (RAT) = 17.8 g/kg Oral LD50 (RAT) = 11.5 g/kg Oral LD50 (RAT) = 10.6 g/kg Oral LD50 (RAT) = 7,060 mg/kg Inhalation LC50 (RAT, 10 h) = 20000 ppm	Central nervous system, Irritant
Chromium	None	Irritant, Allergen, Eyes
Nickel	None	Allergen, Carcinogen, Irritant, Kidney, Mutagen, Reproductive, Respiratory

Methanol	Oral LD50 (RAT) = 5,628 mg/kg Oral LD50 (RABBIT) = 14.4 g/kg Dermal LD50 (RABBIT) = 15,800 mg/kg Inhalation LC50 (RAT, 6 h) = 87.5 mg/l Inhalation LC50 (RAT, 4 h) = 64000 ppm	Eyes, Heart, Irritant, Kidney, Liver, Metabolic, Nervous System, Reproductive
Arsenic	Oral LD50 (RAT) = 763 mg/kg	Blood, Carcinogen, Cardiac, Gastrointestinal, Irritant, Kidney, Nervous System, Skin, Vascular

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Distillates (petroleum), hydrotreated middle	No	No	No
Silicon dioxide	No	No	No
Silicone Resin	No	No	No
Diiron trioxide	No	No	No
Substituted Silane	No	No	No
Acetic acid	No	No	No
Substituted silane	No	No	No

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Dimethyl siloxane, hydroxyterminated	No	No	No
Distillates (petroleum), hydrotreated middle	No	No	No
Silicon dioxide	No	No	No
Siloxanes and Silicones, di-Me	No	No	No
Diiron trioxide	No	No	No
Methylsilanetriyl triacetate	No	No	No
Triacetoxethylsilane	No	No	No
Acetic acid	No	No	No
Gamma-glycidoxypropyl trimethoxysilane	No	No	No
Barium sulfate	No	No	No
Silicic acid, ethyl ester	No	No	No
Silicon dioxide	No	No	No
Amorphous fumed silica	No	No	No
Tetraethyl silicate	No	No	No
Ethanol	No	No	No
Chromium	No	No	No
Nickel	Reasonably Anticipated to be a Human Carcinogen.	No	No
Methanol	No	No	No
Arsenic	Known To Be Human Carcinogen.	Group 1	Yes

## 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. 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

## 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

**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/NDSL 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.

**Prepared by:** Catherine Bimler, Regulatory Affairs Specialist

**Issue date:** 11/25/2015

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