



## Safety Data Sheet

LOCTITE SI 596 RD known as LOCTITE SUPERFLEX RED RTV  
80ML

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SDS No. : 191177  
V001.4  
Date of issue: 03.09.2020

### Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** LOCTITE SI 596 RD known as LOCTITE SUPERFLEX RED RTV 80ML

**Intended use:** Sealant

**Supplier:**

Henkel Australia Pty Ltd  
135-141 Canterbury Road  
Kilsyth, Victoria, 3137  
Australia

Phone: +61 (3) 9724 6444

**Emergency information:** 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

### Section 2. Hazards identification

**Classification of the substance or mixture**

Hazardous according to the criteria of Safe Work Australia.

**GHS Classification:**

**Hazard Class**

Skin irritation  
Serious eye irritation

**Hazard Category**

Category 2  
Category 2A

**Hazard pictogram:**



**Signal word:**

Danger

**Hazard statement(s):**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

**Precautionary Statement(s):**

**Prevention:**

P264 Wash thoroughly after handling.  
P280 Wear protective gloves, clothing, eye and face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362 Take off contaminated clothing.  
P337+P313 If eye irritation persists: Get medical advice/attention.

**Response:**

**Dangerous Goods information:**

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

### Section 3. Composition / information on ingredients

**General chemical description:** Mixture  
**Type of preparation:** Acetoxy curing silicone

**Identity of ingredients:**

Chemical ingredients	CAS-No.	Proportion
Silicon dioxide	7631-86-9	< 10 %
Diiron trioxide	1309-37-1	< 10 %
non hazardous ingredients~		10- <100 %

### Section 4. First aid measures

**Ingestion:** Do not induce vomiting.  
Seek medical advice.

**Skin:** Rinse with running water and soap.  
Obtain medical attention if irritation persists.

**Eyes:** Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Inhalation:** Move to fresh air. If symptoms persist, seek medical advice.

**First Aid facilities:** Eye wash

### Section 5. Fire fighting measures

**Suitable extinguishing media:** Carbon dioxide, foam, powder  
Fine water spray

**Decomposition products in case of fire:** carbon oxides.  
Silica fume

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus.

**Additional fire fighting advice:** In case of fire, keep containers cool with water spray.

### Section 6. Accidental release measures

**Personal precautions:** Avoid contact with skin and eyes.  
Ensure adequate ventilation.

**Environmental precautions:** Do not let product enter drains.

**Clean-up methods:** Scrape up as much material as possible.  
Ensure adequate ventilation.  
Store in a partly filled, closed container until disposal.

**Section 7. Handling and storage**

- Precautions for safe handling:** Use only in well-ventilated areas.  
Vapours should be extracted to avoid inhalation.
- Conditions for safe storage:** Store in a cool, well-ventilated place.  
Never allow product to get in contact with water during storage

**Section 8. Exposure controls / personal protection****National exposure standards:**

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m <sup>3</sup> )	Peak Limit. (ppm)	Peak Limit. (mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )
SILICA, AMORPHOUS: FUMED SILICA (RESPIRABLE DUST) 7631-86-9	Respirable dust.		2				
FUMED SILICA (RESPIRABLE DUST) 7631-86-9	Respirable dust.		2				
IRON OXIDE FUME (FE <sub>2</sub> O <sub>3</sub> ) (AS FE) 1309-37-1	Fume.		5				

None

- Engineering controls:** Use only with adequate ventilation.
- Eye protection:** Wear protective glasses.
- Skin protection:**  
The use of chemical resistant gloves such as Nitrile is recommended.  
Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.
- Respiratory protection:** Use only in well-ventilated areas.  
If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

**Section 9. Physical and chemical properties**

- Appearance:** Red  
Liquid, Paste
- Odor:** Acetic acid
- pH:** Not applicable
- Specific gravity:** 1.01
- Flash point:** > 93 °C (> 199.4 °F)
- Vapor pressure:** 13 hPa  
(; 21 °C (69.8 °F))
- Vapor density:** Heavier than air.
- Density:** 1.01 g/cm<sup>3</sup>
- Solubility in water:** Not soluble. Polymerizes in presence of water.

**Section 10. Stability and reactivity**

<b>Conditions to avoid:</b>	Stable under normal conditions of storage and use.
<b>Incompatible materials:</b>	Acids. Bases. Oxidizing agents. Polymerises in presence of water.
<b>Hazardous decomposition products:</b>	Acetic acid is liberated slowly upon contact with moisture.

**Section 11. Toxicological information**

<b>Health Effects:</b>	
<b>Ingestion:</b>	Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.
<b>Skin:</b>	May cause skin irritation.
<b>Eyes:</b>	Causes serious eye damage. Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
<b>Inhalation:</b>	Acetic acid produced during cure may irritate eyes, nose and throat. May irritate the nose and respiratory system.
<b>Chronic effects:</b>	No chronic health effects are expected from the intended use of these products or from foreseeable handling of them in the workplace.

**Acute toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Silicon dioxide 7631-86-9	LD50 LC50 LD50	> 5,000 mg/kg > 2.08 mg/l > 5,000 mg/kg	oral inhalation dermal	4 h	rat rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity) not specified
Diiron trioxide 1309-37-1	LD50 LC50	> 5,000 mg/kg > 5 mg/l	oral inhalation	4 h	rat rat	EU Method B.1 bis (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity)

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Silicon dioxide 7631-86-9	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Diiron trioxide 1309-37-1	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Silicon dioxide 7631-86-9	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Diiron trioxide 1309-37-1	not irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Silicon dioxide 7631-86-9	negative negative negative	bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay in vitro mammalian chromosome aberration test	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Silicon dioxide 7631-86-9	negative	inhalation		rat	not specified
Diiron trioxide 1309-37-1	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		not specified OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Diiron trioxide 1309-37-1					

**Repeated dose toxicity:**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Silicon dioxide 7631-86-9	NOAEL=>4,000- 4,500 mg/kg	oral: feed	13 weeksdaily	rat	equivalent or similar to OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Silicon dioxide 7631-86-9	NOAEL=1.3 mg/m3	inhalation	13 w6 h/d, 5 d/w	rat	equivalent or similar to OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)
Diiron trioxide 1309-37-1		inhalation	4 w6h/d, 5d/w	rat	OECD Guideline 412 (Repeated Dose Inhalation Toxicity: 28/14-Day)

**Section 12. Ecological information**

**General ecological information:**

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards. In the cured state contribution of this product to Environmental Hazards is insignificant in comparison to articles in which it is used. Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered.

**Ecotoxicity:**

Do not empty into drains / surface water / ground water.

**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Silicon dioxide 7631-86-9	LC50	> 10,000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Silicon dioxide 7631-86-9	EL50	> 1,000 mg/l	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Silicon dioxide 7631-86-9	NOELR	10,000 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Silicon dioxide 7631-86-9	EL50	> 10,000 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Silicon dioxide 7631-86-9	EC0	10,000 mg/l	Bacteria	30 min	Pseudomonas putida	DIN 38412, part 27 (Bacterial oxygen consumption test)
Diiron trioxide 1309-37-1	LC50	> 1,000 mg/l	Fish	48 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Diiron trioxide 1309-37-1	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Diiron trioxide 1309-37-1	EC0	> 5,000 mg/l	Bacteria	24 h		not specified

**Bioaccumulative potential / Mobility in soil:**

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Silicon dioxide 7631-86-9	0.53					QSAR (Quantitative Structure Activity Relationship)

**Section 13. Disposal considerations****Waste disposal of product:**

Collection and delivery to recycling enterprise or other registered elimination institution. Cured rubber can be incinerated or landfilled following EPA and local regulations.

**Disposal for uncleaned package:**

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated. Disposal must be made according to official regulations.

**Section 14. Transport information****Road and Rail Transport:****Dangerous Goods information:**

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

**Marine transport IMDG:**

Not dangerous goods

**Air transport IATA:**

Not dangerous goods

## Section 15. Regulatory information

**SUSMP Poisons Schedule**

None

**AICS:**

All components are listed or are exempt from listing on the Australian Inventory of Chemical Substances (AICS).

## Section 16. Other information

**Abbreviations/acronyms:**

ADGC - Australian Dangerous Goods Code  
IMDG: International Maritime Dangerous Goods code  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
GHS: Globally Harmonized System  
CAS: Chemical Abstracts Service  
OECD: Organization for Economic Cooperation and Development  
LD 50: Lethal Dose 50%  
LC 50: Lethal Concentration 50%

**Reason for issue:**

Reviewed MSDS. Reissued with new date. involved chapters: 2,3,8,16

**Date of previous issue:**

14.09.2015

**Disclaimer:**

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