



## Safety Data Sheet

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LOCTITE SI 596 RD known as LOCTITE® SUPERFLEX® RED  
HIGH T

SDS No. : 191177

V001.2

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### SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product name:** LOCTITE SI 596 RD known as LOCTITE® SUPERFLEX® RED HIGH T

**Intended use:** Adhesive

**Supplier:**  
Henkel New Zealand Ltd  
2 Allens Rd  
Auckland, 2013  
New Zealand  
Phone: +64 (9) 272-6710

**Emergency information:** 24 HOUR EMERGENCY CONTACT NUMBER 0800 243 622

### SECTION 2 HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

Not classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

Not classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

**GHS Classification:**

No classification required.

### 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	1- < 10 %
Diiron trioxide	1309-37-1	1- < 10 %
Cyclosiloxanes, di-Me	69430-24-6	0.1- < 1 %
non hazardous ingredients~		60 %

#### SECTION 4 FIRST AID MEASURES

<b>Ingestion:</b>	Do not induce vomiting. Seek medical advice.
<b>Skin:</b>	Rinse with running water and soap. Obtain medical attention if irritation persists.
<b>Eyes:</b>	Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, seek medical advice.
<b>First Aid facilities:</b>	Eye wash
<b>Medical attention and special treatment:</b>	Treat symptomatically.

#### SECTION 5. FIRE FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Carbon dioxide, foam, powder Fine water spray
<b>Decomposition products in case of fire:</b>	carbon oxides. Silica fume
<b>Special protective equipment for fire-fighters:</b>	Wear self-contained breathing apparatus.
<b>Additional fire fighting advice:</b>	In case of fire, keep containers cool with water spray.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Avoid contact with skin and eyes. Ensure adequate ventilation.
<b>Environmental precautions:</b>	Do not let product enter drains.
<b>Clean-up methods:</b>	Scrape up as much material as possible. Ensure adequate ventilation. Store in a partly filled, closed container until disposal.

#### SECTION 7. HANDLING AND STORAGE

<b>Precautions for safe handling:</b>	Use only in well-ventilated areas. Vapours should be extracted to avoid inhalation.
<b>Conditions for safe storage:</b>	Store at room temperature.

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Workplace exposure standards:**

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Ceiling	STEL (ppm)	STEL (mg/m3)
Particulates not otherwise classified, inhalable dust Inhalable dust (not otherwise classified) 7631-86-9	Inhalable dust.		10	-	-	-
Particulates not otherwise classified, respirable dust Respirable dust (not otherwise classified)	Respirable dust.		3	-	-	-
IRON OXIDE DUST AND FUME (FE <sub>2</sub> O <sub>3</sub> ), AS FE 1309-37-1	Dust and fume.		5	-	-	-

**Biological Exposure Indices:**

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**

<b>Appearance:</b>	Red Liquid, Paste
<b>Odor:</b>	Acetic acid
<b>pH:</b>	Not applicable
<b>Specific gravity:</b>	1.01
<b>Flash point:</b>	> 93 °C (> 199.4 °F)
<b>Lower explosive limit:</b>	4 % (V) (acetic acid)
<b>Upper explosive limit:</b>	19.9 % (V) (acetic acid)
<b>Vapor pressure:</b>	13 hPa (; 21 °C (69.8 °F))
<b>Vapor density:</b>	Heavier than air.
<b>Density:</b>	1.01 g/cm <sup>3</sup>
<b>Solubility in water:</b>	Not soluble. Polymerizes in presence of water.

**SECTION 10. STABILITY AND REACTIVITY****Conditions to avoid:** 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.
<b>Hazardous polymerization:</b>	Will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

**Health Effects:**

<b>Ingestion:</b>	May cause irritation of the stomach
<b>Skin:</b>	May cause skin irritation.
<b>Eyes:</b>	May cause mild irritation
<b>Inhalation:</b>	Inhalation of mist or spray may cause irritation of the respiratory tract and nasal passages.

**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)
Cyclosiloxanes, di-Me 69430-24-6	LD50 LC50 LD50	> 5,000 mg/kg 8.67 mg/l > 2,000 mg/kg	oral inhalation dermal	4 h	rat rat rabbit	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity) equivalent or similar to OECD Guideline 402 (Acute Dermal 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)

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Diiron trioxide 1309-37-1	not sensitising	Maurer optimisati on test	guinea pig	Maurer Optimisation Test

**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	negative	intratracheal		rat	other guideline:

**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	NOAEL=0.0047 mg/l	inhalation: dust	13 w6h/d, 5d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-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:**

Harmful to aquatic life.

**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) other guideline:
Diiron trioxide 1309-37-1	LC50	Toxicity > Water solubility	Fish	96 h	Danio rerio	
Diiron trioxide 1309-37-1	EC50	Toxicity > Water solubility	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Diiron trioxide 1309-37-1	EC50	Toxicity > Water solubility	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diiron trioxide 1309-37-1	NOEC	Toxicity > Water solubility	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Diiron trioxide 1309-37-1	EC50	Toxicity > Water solubility	Bacteria	3 h	activated sludge of a predominantly domestic sewage	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)
Cyclosiloxanes, di-Me 69430-24-6	LC50	Toxicity > Water solubility	Fish	96 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cyclosiloxanes, di-Me 69430-24-6	EC50	Toxicity > Water solubility	Bacteria	3 h	not specified	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

**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)
Cyclosiloxanes, di-Me 69430-24-6	5.64					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

**Dangerous Goods information:**

**Land Transport:**

Not classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

**Marine transport IMDG:**

Not dangerous goods

**Air transport IATA:**

Not dangerous goods

### SECTION 15. REGULATORY INFORMATION

**New Zealand regulatory information:**

Not classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

**HSNO Approval Number:** not applicable

**Site and Storage:** Refer to the site and storage requirements for this Group Standard.  
Refer to the HSNO controls for approved hazardous substances.

**NZIoC:** Compliant for NZIOC

### SECTION 16. OTHER INFORMATION

**Abbreviations/acronyms:** STEL - Short term exposure limit  
TWA - Time weighted average  
HSNO - Hazardous Substances and New Organisms  
GHS: Globally Harmonized System  
CAS: Chemical Abstracts Service  
LD 50: Lethal Dose 50%  
LC 50: Lethal Concentration 50%  
IMDG: International Maritime Dangerous Goods code  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

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