



Safety Data Sheet

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

Item No.191177

V001.2

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MSDS No:MSDS number is not provided because it does not meet the classification criteria according to Article 104 of the OSHA

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

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

B. Purpose of the product and limitations:

Purpose of the product Adhesive
Limitations Prohibition on use except the above

C. Identification of manufacturer, importer or distributor

Importer: Henkel Korea Ltd. - Seoul Branch, 04177, 1st Floor, Henkel Tower Bldg., 41, Mapo-daero 4da-gil, Mapo-gu, Seoul, Korea. Phone : +82-2-3279-1700

Emergency information: +82-2-3279-1700 or Emergency tel : +82-2-3279-1707 (24hr)

D. Writer division and contact person:

Product Safety & Regulatory Affairs for South Korea, msdsakorea@henkel.com

2. Hazards and Risk identification

A. Hazard Classification:

<u>Hazard Class</u>	<u>Hazard Category</u>
No classification information available	

B. Item of labeling with Risk and Safety assessment phrase:

Hazard pictogram:

Signal word: No signal word.

Hazard statement: - No hazard statement.

Precautionary Statement(s):

Prevention: - No information according to GHS.

Response: - No information according to GHS.

Storage: - No information according to GHS.

Disposal: - No information according to GHS.

C. Possible Hazards: None if used properly.

3. Composition / information on ingredients

General description: Mixture

Chemical name	Other name(s)	CAS No. or ID No.	Contents (%)
Silicon dioxide	Silica	7631-86-9	>= 5 - < 10 %
Diiron trioxide	Iron oxide (Fe2O3)	1309-37-1	>= 1 - < 5 %

All remaining chemical compositions are below threshold limit and are not subjected to GHS classification according to the Ministry of Employment and Labor Public Notice.

4. First aid measures

- A. After eye contact:** Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.
- B. After skin contact:** Rinse with running water and soap.
Obtain medical attention if irritation persists.
- C. After inhalation:** Move to fresh air. If symptoms persist, seek medical advice.
- D. After ingestion:** Do not induce vomiting.
Seek medical advice.
- E. Others / Medical advice:** Treat symptomatically.

5. Explosion / Fire fighting measures

- A. Suitable (and unsuitable) extinguishing media:**
Suitable extinguishing media: Carbon dioxide, foam, powder
Fine water spray
- B. Special exposure hazard arising from product itself:**
Hazardous combustion products: carbon oxides.
Silica fume
Formaldehyde

Fire and Explosion Risk: In case of fire, keep containers cool with water spray.

- C. Special protective equipments for firefighters and safety measures:**
Wear self-contained breathing apparatus.

6. Accidental release measures

- A. Personal precautions / measures and equipments:**
Avoid contact with skin and eyes.
Ensure adequate ventilation.
- B. Environmental precautions / measures:**
Do not let product enter drains.

C. Methods of cleaning up / removing:

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

7. Handling and storage

A. Safety Handling precaution:

Safety Handling precaution: Use only in well-ventilated areas.
Vapours should be extracted to avoid inhalation.

B. Suitable storage conditions:

Suitable storage conditions: Store at room temperature.

8. Exposure controls / personal protection

A. Component exposure limits:

Hazardous components	National standard	OSHA	ACGIH
Silicon dioxide 7631-86-9	none	20 MPPCF TWA 0.8 mg/m ³ TWA 15 MPPCF TWA Respirable fraction. 50 MPPCF TWA Total dust. 15 mg/m ³ TWA Total dust. 5 mg/m ³ TWA Respirable fraction.	6 mg/m ³ TWA 3 mg/m ³ TWA 10 mg/m ³ TWA
Diiron trioxide 1309-37-1	5 mg/m ³ TWA 5 mg/m ³ TWA	10 mg/m ³ PEL Fume. 50 MPPCF TWA Total dust. 5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust. 15 MPPCF TWA Respirable fraction.	5 mg/m ³ TWA

B. Engineering controls: Use only with adequate ventilation.

C. Personal protective equipments:

- **Respiratory protection:** Use only in well-ventilated areas.
- **Eye protection:** Wear protective glasses.
- **Skin protection:**

Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Wear suitable protective clothing.
- **Personal protection:** Good industrial hygiene practices should be observed.

9. Physical and chemical properties

A. Appearance (physical state, color):	Liquid, Paste Red
B. Odor:	Acetic acid
C. Odor threshold value:	Not available.
D. pH:	Not applicable
E. Melting point / Freezing point:	No data available.
F. Boiling point:	Not available.
G. Flash point:	> 93 °C (> 199.4 °F)
H. Speed of volatilization:	Not available.
I. Flammability:	Not applicable
J. Upper flammable /Lower flammable:	4 %(V)
lower [vol%]	19.9 %(V)
upper [vol%]	(acetic acid) Upper/lower explosion limit
K. Vapor pressure:	13 hPa
L. Solubility:	Not soluble. Polymerizes in presence of water.
M. Vapor density:	Heavier than air.
N. Specific Gravity:	1.01
O. N-Octanol / Water partition coefficient:	Not available.
P. Self ignition point:	Not available.
Q. Decomposition:	Not available.
R. Viscosity:	Not available.
S. Molecular Weight:	Not available.

10. Stability and reactivity

A. Chemical stability:	Stable under recommended storage conditions.
B. Possibility of hazardous polymerization:	Will not occur.
C. Avoid condition (discharge of static electricity, shock, vibration):	Stable under normal conditions of storage and use.
D. Avoid materials:	Acids. Water Bases. Oxidizing agents.
E. Decomposition products:	Acetic acid is liberated slowly upon contact with moisture. At higher temperatures (>150C) may release formaldehyde (traces).

11. Toxicological information

A. Information for exposure route: Skin, Inhalation, Eyes

B. Information for health and hazard identification:

Acute Toxicity Estimate of Mixture (ATE mix):

Oral toxicity:Not available.

Inhalative toxicity:

Acute toxicity estimate (ATE) : > 20 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Method: Calculation method

Dermal toxicity:Not available.

Acute toxicity: No data available.

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:

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Specific Target Organ Toxicity - Single exposure : No data available.

Specific Target Organ Toxicity – Repeated exposure : No data available.

Aspiration hazard: No data available.

Additional Health Hazard Information

Ingredients	Hazard class	Hazard category	Route of exposure	Target organ(s)
Silicon dioxide	No classification required.			
Diiron trioxide	No classification required.			

12. Ecological information

A. Ecological toxicity

Hazardous components CAS-No.	Value type	Value / Remark	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)
	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)

B. Persistence / degradability:

No data available.

C. Bioaccumulative Potential

No data available.

D. Soil Mobility

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)

E. Other Adverse Effects: Do not empty into drains, soil or bodies of water.

13. Disposal considerations

A. Disposal method:

Dispose of in accordance with local and national regulations.

B. Waste information (including waste method of contaminated container and packaging):

Waste disp. packag. not clean: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.

14. Transport information

- A. UN number:** Not classified as dangerous goods for transport
- B. UN proper shipping name:** Not applicable
- C. Transport hazard class:** Not applicable
- D. Packing group (if applicable):** Not applicable
- E. Marine pollution (yes/no):** Not applicable
- F. Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises:** Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

15. Regulatory information

- A. According to Industrial Safety & Health Act:**
 - Harmful Substances Prohibited from Manufacturing:**
Neither banned nor restricted
 - Harmful Substances Requiring Permission for Manufacture or Use:**
Neither banned nor restricted
 - Harmful Substances Requiring Workplace Environment Monitoring:**
Silicon dioxide
Diiron trioxide
 - Controlled Hazardous Substances:**
Diiron trioxide

Harmful Substances Requiring Special Medical Examination:

Silicon dioxide
Diiron trioxide

Korea OELs:

Silicon dioxide
Diiron trioxide

B. According to Chemicals Control Law:

Toxic Chemicals:

Neither banned nor restricted

Banned Toxic Chemicals:

Neither banned nor restricted

Restricted Toxic Chemicals:

Neither banned nor restricted

Accidental Release Prevention Substances:

Neither banned nor restricted

C. According to Dangerous Substances Safety Management Act Enforcement Rule :

4th Class Flammable Liquids, Class 3 Petroleum (Non Water Soluble), Hazard Class III

D. According to Enforcement Decree of The wastes control Act :

Designated Wastes, Appendix 4, Code Numbers.

Designated Wastes

E. According to other regulations:

Not available.

16. Other information

A. Reference:

msds.kosha.or.kr/MSDSInfo
IUCLID
Henkel MSDSetc.
NCIS

B. Date of creation:

13.04.2017

C. Revision number and the latest version date

V001.2
09.09.2021

D. Disclaimer:

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