Safety Data Sheet

LOCTITE SI 5920 RTV COPPER SILICONE known as Loctite 5920 Copper 85G AU

SDS No. : 152854
V001.4
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MSDS No.

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

Product name: LOCTITE SI 5920 RTV COPPER SILICONE known as Loctite 5920 Copper 85G AU

Intended use: Silicone 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	Hazard Category
Serious eye damage/eye irritation	Category 1
Skin sensitizer	Category 1
Chronic hazards to the aquatic environment	Category 2

Hazard pictogram:

Signal word: Danger

Hazard statement(s):
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention:
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves, eye protection, and face protection.

Response:
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.

Disposal:
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

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: Silicone sealant

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Butan-2-one O,O',O"-(vinylsilylidyne)trioxime	2224-33-1	3- < 10 %
Diiron trioxide	1309-37-1	< 10 %
Mica	12001-26-2	< 10 %
Dimethyltindineodecanoate	68928-76-7	< 1 %
non hazardous ingredients~		60- < 100 %

Section 4. First aid measures

Ingestion:
Do not induce vomiting.
Have victim rinse mouth thoroughly with water.
Seek medical advice.

Skin:
Rinse with running water and soap.
Seek medical advice.

Eyes:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical advice.

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

First Aid facilities:
Eye wash and safety shower
Normal washroom facilities

Medical attention and special treatment: Treat symptomatically.

Section 5. Fire fighting measures

Suitable extinguishing media:
Dry chemical.
Carbon dioxide.
foam

Decomposition products in case of fire:
Thermal decomposition can lead to release of irritating gases and vapors.
Carbon monoxide.
Carbon dioxide.
Oxides of silicon.
Formaldehyde.

Special protective equipment for fire-fighters:
Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Wear full protective clothing.

Section 6. Accidental release measures

Personal precautions:
Avoid contact with skin and eyes.
Wear protective equipment.

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.
Wear protective equipment.

Conditions for safe storage:
Store only in the original container.
Store in a cool, well-ventilated place.

Section 8. Exposure controls / personal protection

National exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Peak Limit. (ppm)	Peak Limit. (mg/m3)	STEL (ppm)	STEL (mg/m3)
IRON OXIDE FUME (FE2O3) (AS FE) 1309-37-1	Fume.		5				
MICA 12001-26-2			2.5				
TIN, ORGANIC COMPOUNDS (AS SN) 68928-76-7			0.1				

TIN, ORGANIC COMPOUNDS (AS SN) 68928-76-7							0.2

None

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Eye protection: Safety goggles or safety glasses with side shields.

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

Odor: odourless

Specific gravity: 1.31

Flash point: > 93 °C (> 199.4 °F)
(Tagliabue closed cup)

Vapor pressure: < 666.6 Pa
(; 20 °C (68 °F))

Vapor density: Heavier than air.

Section 10. Stability and reactivity

Stability: Stable under normal conditions of temperature and pressure.

Conditions to avoid: Exposure to air or moisture over prolonged periods.
Avoid temperatures above 150°C (302°F).

Incompatible materials: Acids and bases.
Oxidizing agents.
Polymerizes on contact with water.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

Carbon monoxide.
Carbon dioxide.
Oxides of silicon.
Formaldehyde
Methyl ethyl ketoxime formed during cure.
Methanol is liberated slowly upon exposure to moisture.

Hazardous polymerization: Will not occur.

Section 11. Toxicological information

Health Effects:

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin: May cause mild skin irritation.
Symptoms may include redness, edema, drying, defatting and cracking of the skin.
May cause skin sensitization.

Eyes: Causes serious eye damage.

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	LD50 LD50	> 2,000 mg/kg > 2,009 mg/kg	oral dermal		rat rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure) OECD Guideline 402 (Acute Dermal Toxicity)
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)
Mica 12001-26-2	LD50	> 5,000 mg/kg	oral		rat	not specified
Dimethyltindineodecanoate 68928-76-7	LD50 LD50	160 mg/kg > 2,000 mg/kg	oral dermal		rat rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Diiron trioxide 1309-37-1	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Dimethyltindineodecanoate 68928-76-7	irritating or corrosive	15 min	Human, EpiSkin™ (SM), Reconstructed Human Epidermis (RHE)	OECD Guideline 439 (In Vitro Skin Irritation: Reconstructed Human Epidermis (RHE) Test Method)
Dimethyltindineodecanoate 68928-76-7	not corrosive	1 h	Human, EpiDerm™ SIT (EPI-200), Reconstructed Human Epidermis (RHE)	OECD Guideline 431 (In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
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
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	Sensitizing	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
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
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	NOAEL=10 mg/kg	oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
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., Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered., Do not empty into drains / surface water / ground water.

Ecotoxicity: Toxic to aquatic life with long lasting effects.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	LC50	> 560 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	NOEC	50 mg/l	Fish	14 d	Oryzias latipes	OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	EC50	201 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	EC50	94 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	NOEC	30 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition 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
Mica 12001-26-2	LC50	400 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Mica 12001-26-2	EC50	2,808 mg/l	Daphnia	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Mica 12001-26-2	EC0	1,000 mg/l	Bacteria	30 min		not specified
Dimethyltindineodecanoate 68928-76-7	LC50	Toxicity > Water solubility	Fish	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dimethyltindineodecanoate 68928-76-7	EC50	Toxicity > Water solubility	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Dimethyltindineodecanoate 68928-76-7	EC50	Toxicity > Water solubility	Algae	72 h	not specified	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method

Butan-2-one O,O',O''-(vinylsilylidyne)trioxime 2224-33-1	not readily biodegradable.	aerobic	26 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Dimethyltindineodecanoate 68928-76-7		aerobic	0 - 60 %	OECD 301 A - F

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dimethyltindineodecanoate 68928-76-7		8,650				QSAR (Quantitative Structure Activity Relationship)
Dimethyltindineodecanoate 68928-76-7	5.5					QSAR (Quantitative Structure Activity Relationship)

Section 13. Disposal considerations

Waste disposal of product: Dispose of in accordance with local and national regulations.
Contribution of this product to waste is very insignificant in comparison to article in which it is used

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:

UN no.: 3077
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (octamethylcyclotetrasiloxane)
Class or division: 9
Packing group: III
EmS: F-A ,S-F
Seawater pollutant: Marine pollutant

Air transport IATA:

UN no.: 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (octamethylcyclotetrasiloxane)
Class or division: 9
Packing group: III
Packing instructions (passenger) 956
Packing instructions (cargo) 956

Further information for transport:

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed 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

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Disclaimer:

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