



Safety Data Sheet

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LOCTITE 277

SDS No. : 153485

V001.4

Date of issue: 06.02.2020

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

Product name: LOCTITE 277

Intended use: Threadlocker

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:

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Target organ</u>
Serious eye irritation	Category 2A	
Target Organ Systemic Toxicant - Single exposure	Category 3	respiratory tract irritation
Acute hazards to the aquatic environment	Category 3	
Chronic hazards to the aquatic environment	Category 3	

Hazard pictogram:



Signal word:

Warning

Hazard statement(s): H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):

Prevention: P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear eye protection/face protection.

Response: P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

Storage: P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

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
Methacrylates

Type of preparation: Methacrylate resin based threadlocker

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
α , α -dimethylbenzyl hydroperoxide	80-15-9	1 - < 3 %

Section 4. First aid measures

Ingestion: Rinse mouth, do not induce vomiting, consult a doctor.

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

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
Normal washroom facilities

Medical attention and special treatment: Treat symptomatically.

Section 5. Fire fighting measures

- Suitable extinguishing media:** If product is involved in fire extinguish with dry powder, foam or carbon dioxide.
- Decomposition products in case of fire:** Oxides of carbon.
Oxides of sulfur.
Oxides of nitrogen.
Irritating organic vapours.
- Particular danger in case of fire:** None
- Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

Section 6. Accidental release measures

- Personal precautions:** Avoid skin and eye contact.
Ensure adequate ventilation.
- Environmental precautions:** Do not let product enter drains.
- Clean-up methods:** For small spills wipe up with paper towel and place in container for disposal.
For large spills absorb onto inert absorbent material and place in sealed container for disposal.

Section 7. Handling and storage

- Precautions for safe handling:** Use only in well-ventilated areas.
Avoid skin and eye contact.
- Conditions for safe storage:** Ensure good ventilation/extraction.
Store in original containers at 8-21°C (46.4-69.8°F) and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.
Store in a cool, well-ventilated place.
Do not expose to direct heat.
Store in sealed original container.

Section 8. Exposure controls / personal protection

National exposure standards:

None

- Engineering controls:** Ensure good ventilation/suction at the workplace.
- Eye protection:** Wear protective glasses.
- Skin protection:** Wear suitable protective clothing.
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.
The use of chemical resistant gloves such as Neoprene or Natural Rubber is recommended
- 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
Odor: characteristic
Specific gravity: 1.1
Flash point: > 93.3 °C (> 199.94 °F)
 (Tagliabue closed cup)
Density: 1.0800 g/cm³

Section 10. Stability and reactivity

Conditions to avoid: Keep away from heat, spark and flame.

Incompatible materials: Strong acids and oxidizing agents.
 copper
 Rust.
 Iron.
 Oxygen scavengers.
 Strong alkalis.
 Reducing agents.
 Other polymerization initiators.

Hazardous decomposition products: In case of fire toxic gases can be released.
 Irritating vapors.
 Oxides of carbon.

Hazardous polymerization: Will not occur.

Section 11. Toxicological information

Health Effects:
Ingestion: May be harmful if swallowed.
Skin: May cause mild skin irritation.
Eyes: This product is irritating to the eyes.
Inhalation: May cause respiratory tract irritation.

Aggravated med. condition: Eye, skin, and respiratory disorders.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	LD50	382 mg/kg	oral		rat	other guideline:
	LD50	530 - 1,060			rat	other guideline:
	Acute toxicity estimate (ATE)	mg/kg 1,100 mg/kg	dermal dermal			Expert judgement

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study/ Route of administration	Metabolic activation/ Exposure time	Species	Method
α , α -dimethylbenzyl hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
α , α -dimethylbenzyl hydroperoxide 80-15-9	negative	dermal		mouse	not specified

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time/ Frequency of treatment	Species	Method
α , α -dimethylbenzyl hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	not specified

Section 12. Ecological information

General ecological information: Do not empty into drains, soil or bodies of water.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
α , α -dimethylbenzyl hydroperoxide 80-15-9	LC50	3.9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
α , α -dimethylbenzyl hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
α , α -dimethylbenzyl hydroperoxide 80-15-9	ErC50	3.1 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
α , α -dimethylbenzyl hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		not specified

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
α , α -dimethylbenzyl hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
α , α -dimethylbenzyl hydroperoxide 80-15-9		9.1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
α , α -dimethylbenzyl hydroperoxide 80-15-9	2.16					not specified

Section 13. Disposal considerations

- Waste disposal of product:** Dispose of in accordance with local and national 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.

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

Section 16. Other information

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

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Disclaimer:

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