



Safety Data Sheet

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LOCTITE 222

SDS No. : 153481

V001.4

Date of issue: 17.01.2020

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

Product name: LOCTITE 222

Intended use: Anaerobic 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:

<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
Type of preparation: Methacrylate resin based threadlocker

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
α , α -dimethylbenzyl hydroperoxide	80-15-9	< 3 %
Propane-1,2-diol	57-55-6	< 5 %
non hazardous ingredients~		60 %

Section 4. First aid measures

Ingestion:	Rinse mouth, do not induce vomiting, consult a doctor.
Skin:	Wash skin with water In case of adverse health effects seek medical advice.
Eyes:	Flush eyes with plenty of water for at least 5 minutes. If irritation persists seek medical attention.
Inhalation:	Should not be a problem as product is of low volatility. However, if feeling unwell remove patient to fresh air.
First Aid facilities:	Eye wash Normal washroom facilities

Section 5. Fire fighting measures

Suitable extinguishing media: Foam, dry chemical or carbon dioxide.

Decomposition products in case of fire: Oxides of carbon, oxides of nitrogen, irritating organic vapors.
Oxides of sulfur.

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.

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: Avoid contact with eyes, skin and clothing.
Avoid breathing vapors or mists of this product.
Wash thoroughly after handling.
Use only with adequate ventilation.
See advice in section 8

Conditions for safe storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.
Store in original container until ready to use.

Section 8. Exposure controls / personal protection

National exposure standards: Ingredients	Form of Exposure	TWA(ppm)	TWA (mg/m3)	Peak limit (ppm)	Peak Limit (mg/m3)	STEEL(ppm)	STEL (mg/m3)
PROPANE-1,2-DIOL PARTUCULATES ONLY 57-55-6	Particulate	10					
PROPANE-1,2-DIOL:TOTAL (VAPOUR & PARTUCULATES) 57-55-6	Particulate	150	474				

- Engineering controls:** No specific ventilation requirements noted, but forced ventilation may still be required if concentrations exceed occupational 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.
- Neoprene gloves.
- Butyl rubber gloves.
- Natural rubber gloves.
- 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:** Purple
Liquid
- Odor:** mild
- Specific gravity:** 1.05
- Boiling point:** > 149.0 °C (> 300.2 °F)
- Flash point:** > 93.3 °C (> 199.94 °F)
(Tagliabue closed cup)
- Density:** 1.0800 g/cm3

Section 10. Stability and reactivity

- Conditions to avoid:** See "Handling and Storage" (Section 7) and "Incompatibility" (Section 10).
- Incompatible materials:** Strong alkalis.
Reducing agents.
Strong oxidizing agents.
Acids.
- Hazardous decomposition products:** Irritating and toxic gases or fumes may be released during a fire.

Oxides of sulfur.
Oxides of nitrogen.
Oxides of carbon.
- Hazardous polymerization:** Will not occur.

Section 11. Toxicological information

Health Effects:**Ingestion:**

May cause mild gastrointestinal irritation with nausea, vomiting, diarrhea and abdominal pain.

Skin:

May cause mild skin irritation.

Eyes:

Contact with eyes will cause irritation.

Inhalation:

May cause respiratory tract irritation.

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: other guideline: Expert judgement
	LD50	530 - 1,060 mg/kg	dermal		rat	
	Acute toxicity estimate (ATE)	1,100 mg/kg	dermal			
Propane-1,2-diol 57-55-6	LD50	22,000 mg/kg	oral	2 h	rat	not specified
	LC50	> 317.042 mg/l	inhalation		rabbit	not specified
	LD50	> 2,000 mg/kg	dermal		rabbit	not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
Propane-1,2-diol 57-55-6	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
Propane-1,2-diol 57-55-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Propane-1,2-diol 57-55-6	not sensitising	Guinea pig maximisation test	guinea pig	equivalent or similar to 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
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
Propane-1,2-diol 57-55-6	negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test	without with and without		Ames Test OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Propane-1,2-diol 57-55-6	negative negative negative	oral: gavage intraperitoneal oral: gavage		rat mouse rat	not specified not specified 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
Propane-1,2-diol 57-55-6	NOAEL=1,700 mg/kg	oral: feed	2 yearsdaily	rat	not specified
Propane-1,2-diol 57-55-6	NOAEL=1000 mg/m3	inhalation	90 d6 h/d, 5 d/w	rat	not specified

Section 12. Ecological information

General ecological information: Do not empty into drains / surface water / ground 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
Propane-1,2-diol 57-55-6	LC50	> 10,000 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
Propane-1,2-diol 57-55-6	EC50	18,340 mg/l	Daphnia	48 h	Ceriodaphnia dubia	other guideline:
Propane-1,2-diol 57-55-6	EC50	24,200 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Propane-1,2-diol 57-55-6	NOEC	15,000 mg/l	Algae	14 d	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Propane-1,2-diol 57-55-6	EC50	> 1,000 mg/l	Bacteria	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

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)
Propane-1,2-diol 57-55-6	not inherently biodegradable	aerobic	60 %	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)
Propane-1,2-diol 57-55-6	readily biodegradable	aerobic	> 70 %	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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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
Propane-1,2-diol 57-55-6	-1.07				20.5 °C	EU Method A.8 (Partition Coefficient)

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. 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

Section 16. Other information

Abbreviations/acronyms: ADGC - Australian Dangerous Goods Code
ASCC - Australian Safety and Compensation Council
GHS: Globally Harmonized System
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IMDG: International Maritime Dangerous Goods code
STEL - Short term exposure limit
SUSDP - Standard for the Uniform Medicines of Drugs and Poisons
TWA - Time weighted average

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Disclaimer:

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