Safety Data Sheet according to GB/T 16483 and GB/T 17519

LOCTITE 222 BO50ML CH

Material No.: 2982523
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1. Identification of the substance/preparation and of the company/undertaking

Product name: **LOCTITE 222 BO50ML CH**

Intended use: Anaerobic Sealant

Manufacturer/Importer/Distributor Representative Company

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2. Hazards identification

EMERGENCY OVERVIEW:
Purple, characteristic, liquid, Causes serious eye irritation.May cause respiratory irritation.Toxic to aquatic life.

Classification of the substance or mixture according to GB 30000.1 (Specification for classification and labelling of chemicals—Part 1：General rules):

Hazard Class	Hazard Category	Target organ
Serious eye damage/eye irritation	Category 2A	
Specific target organ toxicity - single exposure	Category 3	respiratory tract irritation
Acute hazards to the aquatic environment	Category 2	

Label elements according to GB 15258 (General rules for preparation of precautionary label for chemicals):

Hazard pictogram:

Signal word: Warning

Hazard statement:	H319 Causes serious eye irritation. H335 May cause respiratory irritation. H401 Toxic to aquatic life.
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, and product characteristics at time of disposal.

Physical and chemical hazards:

Based on current information, there are no physical or chemical hazards.

Health hazards:

Causes serious eye irritation. May cause respiratory irritation.

Environmental hazards:

Toxic to aquatic life.

3. Composition / information on ingredients

Substance or Mixture:
Mixture

Declaration of the ingredients according to GB 30000.1:

Hazard component CAS-No.	Content	GHS Classification
Oleic acid, ethoxylated 9004-96-0	30- < 50 %	Acute hazards to the aquatic environment 2 H401
2-Hydroxyethyl methacrylate, ethoxylated 25736-86-1	2.5- < 10 %	Acute hazards to the aquatic environment 3 H402
α, α-dimethylbenzyl hydroperoxide 80-15-9	1- < 2.5 %	Flammable liquids 4 H227 Organic peroxides E H242 Acute toxicity 4; Oral H302 Acute toxicity 2; Inhalation H330 Acute toxicity 4; Dermal H312 Skin corrosion/irritation 1B H314 Specific target organ toxicity - single exposure 3 H335 Specific target organ toxicity - repeated exposure 2 H373 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
1,4-Naphthalenedione 130-15-4	0.025- < 0.1 %	Acute toxicity 3; Oral H301 Acute toxicity 1; Inhalation H330 Skin corrosion/irritation 1C H314 Serious eye damage/eye irritation 1 H318 Skin sensitizer 1 H317 Specific target organ toxicity - single exposure 3 H335 Acute hazards to the aquatic environment 1 H400 Chronic hazards to the aquatic environment 1 H410

Only hazardous ingredients for which a classification according to GB 30000.1 is already available are displayed in this table. For full text of the Hazard statements see section 16 "Other information".

4. First aid measures

Description of necessary first-aid measures:

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

Eye contact: 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.

Ingestion:	Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting. Seek medical advice.
Most important symptoms/effects, acute and delayed:	The most important known symptoms and effects are described in chapters 2 and/or 11.
Indication of any immediate medical attention and special treatment needed, if necessary:	Post-exposure treatment should focus on controlling the patient's clinical symptoms and signs.

5. Fire fighting measures

Suitable extinguishing media:	Foam, extinguishing powder, carbon dioxide.
Fire-fighting method:	In case of fire, keep containers cool with water spray.
Special hazards arising from the substance or mixture:	Oxides of carbon, oxides of nitrogen, irritating organic vapors.
Special protective actions for fire-fighters:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Ensure adequate ventilation.
Environmental precautions:	Do not let product enter drains.
Methods and materials for containment and cleaning up:	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.

7. Handling and storage

Precautions for safe handling:	Use only in well-ventilated areas. Gloves and safety glasses should be worn Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.
Hygiene measures:	Do not eat, drink, smoke or take snuff while working. Wash thoroughly after handling. Keep absolute tidiness at the working place.Avoid contact with skin and eyes. Remove soiled or soaked clothing immediately. Wash off any contamination that gets onto the skin with plenty of water and soap, skin care.
Conditions for safe storage, including any incompatibilities:	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.

8. Exposure controls / personal protection

Controls parameters:

Occupational Exposure Limits:

Hazardous components CAS-No.	GBZ 2.1-2019	ACGIH	NIOSH	OSHA
Silica, amorphous, fumed, cryst.-free 112945-52-5	8 mg/m3PC-TWA Total dust.	3 mg/m3 TWA Respirable particles. 10 mg/m3 TWA Inhalable particles.	none	none

Biological Exposure Indices: no data available

Engineering controls: No specific ventilation requirements noted, but forced ventilation may still be required if concentrations exceed occupational exposure limits.

Respiratory protection: Use only in well-ventilated areas.

Eye protection: Wear protective glasses.

Body protection: Wear suitable protective clothing.

Hand protection: The use of chemical resistant gloves such as Neoprene or Natural Rubber is recommended

9. Physical and chemical properties

Physical state:	liquid	Appearance:	Purple
Evaporation rate:	Not available.	Odor:	characteristic
pH:	3 - 6 Not applicable	Melting point:	Not available.
Boiling point:	> 149 °C (> 300.2 °F)	Density:	1.0800 g/cm3
Vapor density:	Not available.	Vapor pressure:	Not available.
Flash point:	> 93.3 °C (> 199.94 °F), Tagliabue closed cup	Ignition temperature:	Not available.
Lower explosive limit:	Not available.	Upper explosive limit:	Not available.
Solubility in water	Slightly soluble	Viscosity:	800 - 1,600 mPa.s
Auto-ignition temperature:	Not available.	Flammability:	Not available.
Octanol / water distribution coefficient:	Not available.	Decomposition temperature:	Not available.

VOC:
Bulk adhesive
Acrylate
Assembly Industry
< 80 g/kg, GB 33372-2020 Limit of volatile organic compounds content in adhesive

10. Stability and reactivity

Reactivity: Strong oxidizing agents.

Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	See section reactivity.
Conditions to avoid:	Stable under normal conditions of storage and use.
Incompatible materials:	See section reactivity.
Hazardous polymerization:	Will not occur.

11. Toxicological information

General toxicological information:
No laboratory animal data available.

Acute oral toxicity:

Oleic acid, ethoxylated 9004-96-0	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	not specified
2-Hydroxyethyl methacrylate, ethoxylated 25736-86-1	Value type	Acute toxicity estimate (ATE)
	Value	> 5,000 mg/kg
	Species	
	Method	Expert judgement
α, α-dimethylbenzyl hydroperoxide 80-15-9	Value type	LD Lo
	Value	5,000 mg/kg
	Species	Mouse
	Method	
α, α-dimethylbenzyl hydroperoxide 80-15-9	Value type	LD50
	Value	382 mg/kg
	Species	rat
	Method	other guideline:
1,4-Naphthalenedione 130-15-4	Value type	LD 50
	Value	190 mg/kg
	Species	Rat
	Method	
1,4-Naphthalenedione 130-15-4	Value type	LD50
	Value	124 mg/kg
	Species	rat
	Method	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

2-Hydroxyethyl methacrylate, ethoxylated 25736-86-1	Value type	Acute toxicity estimate (ATE)
	Value	> 5,000 mg/kg
	Species	
	Method	Expert judgement
α, α-dimethylbenzyl hydroperoxide 80-15-9	Value type	Acute toxicity estimate (ATE)
	Value	1,100 mg/kg
	Species	
	Method	Expert judgement

Acute inhalative toxicity:

2-Hydroxyethyl methacrylate, ethoxylated 25736-86-1	Value type	Acute toxicity estimate (ATE)
	Value	> 5 mg/l
	Exposure time	
	Species	
	Method	Expert judgement
α, α-dimethylbenzyl hydroperoxide 80-15-9	Value type	LC50
	Value	1.370 mg/l
	Exposure time	4 h
	Species	rat
	Method	not specified
α, α-dimethylbenzyl hydroperoxide 80-15-9	Value type	LC50
	Value	1.245 mg/l
	Exposure time	4 h
	Species	rat
	Method	Calculation method
1,4-Naphthalenedione 130-15-4	Value type	LC50
	Value	0.046 mg/l
	Exposure time	4 h
	Species	rat
	Method	OECD Guideline 403 (Acute Inhalation Toxicity)

Skin corrosion/irritation:

Oleic acid, ethoxylated 9004-96-0	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	not specified
α, α-dimethylbenzyl hydroperoxide 80-15-9	Result	corrosive
	Exposure time	
	Species	rabbit
	Method	Draize Test
1,4-Naphthalenedione 130-15-4	Result	Category 1C (corrosive)
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Oleic acid, ethoxylated 9004-96-0	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	not specified

Respiratory or skin sensitization:

1,4-Naphthalenedione 130-15-4	Result	sensitising
	Test type	not specified
	Species	guinea pig
	Method	not specified

Germ cell mutagenicity:

α, α-dimethylbenzyl hydroperoxide 80-15-9	Result	positive
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
α, α-dimethylbenzyl hydroperoxide 80-15-9	Result	negative
	Type of study / Route of administration	dermal
	Metabolic activation / Exposure time	
	Species	mouse
	Method	not specified

Carcinogenicity
No data available.

Reproductive toxicity:
No data available.

STOT-single exposure:
No data available.

STOT-repeated exposure:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9		inhalation: aerosol	6 h/d 5 d/w	rat	not specified

Aspiration hazard:
No data available.

Other remarks:
Not available.

12. Ecological information

General ecological information:
Do not empty into drains / surface water / ground water.

Toxicity:

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Value type	Value	Exposure time	Species	Method
Oleic acid, ethoxylated 9004-96-0	LC50	> 1 - 10 mg/l	96 h	fish	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-Hydroxyethyl methacrylate, ethoxylated 25736-86-1	LC50	> 10 - 100 mg/l	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
α, α-dimethylbenzyl hydroperoxide 80-15-9	LC50	3.9 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
1,4-Naphthalenedione 130-15-4	LC50	0.045 mg/l	96 h	Oryzias latipes	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (aquatic invertebrates):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Value type	Value	Exposure time	Species	Method
Oleic acid, ethoxylated 9004-96-0	EC50	> 1 - 10 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
α, α-dimethylbenzyl hydroperoxide 80-15-9	EC50	18.84 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,4-Naphthalenedione 130-15-4	EC50	0.026 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity (aquatic invertebrates):

No data available.

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Value type	Value	Exposure time	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	EC50	3.1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
α, α-dimethylbenzyl hydroperoxide 80-15-9	NOEC	1 mg/l	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,4-Naphthalenedione 130-15-4	NOEC	0.07 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,4-Naphthalenedione 130-15-4	EC50	0.42 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity (microorganisms):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Value type	Value	Exposure time	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	EC10	70 mg/l	30 min	not specified	not specified
1,4-Naphthalenedione 130-15-4	EC50	5.94 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

Persistence and degradability

Hazardous components CAS-No.	Result	Test type	Degradability	Exposure time	Method
Oleic acid, ethoxylated 9004-96-0	readily biodegradable	not specified	> 60 %	28 day	OECD 301 A - F
2-Hydroxyethyl methacrylate, ethoxylated 25736-86-1	readily biodegradable		> 60 %	28 day	OECD 301 A - F
α, α-dimethylbenzyl hydroperoxide 80-15-9	not readily biodegradable.	aerobic	3 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

Bioaccumulative potential

No data available.

Hazardous components CAS-No.	Bioconcentration factor (BCF)	Exposure time	Temperature	Species	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	9.1			calculation	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

Mobility in soil:

Hazardous components CAS-No.	LogPow	Temperature	Method
α, α-dimethylbenzyl hydroperoxide 80-15-9	1.6	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
1,4-Naphthalenedione 130-15-4	1.71		not specified

Endocrine disrupting properties

No data available.

Other adverse effects
Not available.

13. Disposal considerations

Product disposal: Dispose of in accordance with local and national regulations.

Disposal of uncleaned packages: 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.

14. Transport information

Road transport CN_DG:
Not dangerous goods

Marine transport IMDG:
Not dangerous goods

Air transport IATA:
Not dangerous goods

Notice For Transportation: Transport according to local and national regulations. Ensure containers will not leak, collapse, or being damaged when transported. DO NOT transport with incompatible materials. Transportation vehicle should be equipped with right fire-fighting equipment in case of emergency. Avoid solarization, drenched and high temperature when transported.

15. Regulatory information

The following laws and regulations lay down provisions in terms of chemicals safety use, storage, transportation, loading/ unloading, classification as well as symbol.
"Law of the People's Republic of China on Work Safety".
Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases".
"Law of the People's Republic of China on environmental protection".
"Regulation on the Safety Management of Hazardous Chemicals".
"Regulations on License to Work Safety".

China Inventory of Existing Chemicals:	All components are listed or are exempt from Inventory of Existing Chemical Substances in China.

16. Other information

Issue date:	18.08.2025
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Disclaimer:	This Safety Data Sheet has been generated in accordance with Chinese law only. It provides information on the chemical product in the aspects of safety, health, environment, etc, recommending preventive and protective measures and countermeasures in case of emergency. The information contained herein does not constitute a guarantee concerning the properties of the material. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance.This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.
Others:	**The full text of all abbreviations indicated by codes in this safety data sheet section 3 are as follows:** H227 Combustible liquid. H242 Heating may cause a fire. H301 Toxic if swallowed. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H401 Toxic to aquatic life. H402 Harmful to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.