Safety Data Sheet according to GB/T 16483-2008

LOCTITE® 242™ THREADLOCKER MEDIUM STRENGTH

SDS No. : 150233
V001.10
Revision: 01.04.2016
printing date: 06.06.2018

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

Product name: LOCTITE® 242™ THREADLOCKER MEDIUM STRENGTH

Intended use: Anaerobic

Company name:
Henkel (China) Investment Co. Ltd.
No.928 Zhangheng Rd.
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China

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Revision date: 01.04.2016

Emergency information: Emergency telephone: +86 532 8388 9090 (24h).

2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 (General rule for classification and hazard communication of chemicals):

Hazard Class	Hazard Category	Target organ
Serious eye damage/eye irritation	Category 2A	
Specific target organ toxicity - single exposure	Category 3	respiratory tract irritation

Label elements according to GB 15258-2009 (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.
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. 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.

3. Composition / information on ingredients

General description: Mixture

Declaration of the ingredients according to GB 13690-2009:

Hazard component CAS-No.	Content	GHS Classification
Cumene hydroperoxide 80-15-9	1- < 10 %	Flammable liquids 4 H227 Organic peroxides E H242 Acute toxicity 4; Oral H302 Acute toxicity 3; Inhalation H331 Acute toxicity 4; Dermal H312 Skin corrosion/irritation 1B H314 Specific target organ toxicity - repeated exposure 2 H373 Acute hazards to the aquatic environment 2 H401 Chronic hazards to the aquatic environment 2 H411
Titanium dioxide 13463-67-7	0.1- < 1 %	
1,4-Naphthalenedione 130-15-4	< 0.1 %	Acute toxicity 3; Oral H301 Acute toxicity 1; Inhalation H330 Skin corrosion/irritation 2; Dermal H315 Serious eye damage/eye irritation 2A H319 Skin sensitizer 1; Dermal H317 Specific target organ toxicity - single exposure 3; Inhalation 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 13690-2009 is already available are displayed in this table. For full text of the Hazard statements see section 16 "Other information".

4. First aid measures

Skin contact: Wash skin with water
In case of adverse health effects seek medical advice.

Eye contact: 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.

Ingestion: Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting.
In case of adverse health effects seek medical advice.

5. Fire fighting measures

Hazardous combustion products: Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Extinguishing media: carbon dioxide, foam, powder, water spray jet, fine water spray

Fire-fighting method: In case of fire use foam or powder extinguisher.

Notice and measures for firing fighting: In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

6. Accidental release measures

Emergency measures: Ensure adequate ventilation.
Avoid contact with skin and eyes.

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.

7. Handling and storage

Notice for handling: Use only in well-ventilated areas.
Avoid skin and eye contact.
See advice in section 8

Notice for storage: 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

Hazardous components	GBZ 2.1-2007	ACGIH	NIOSH	OSHA
Titanium dioxide	8 mg/m3PC-TWA	10 mg/m3 TWA		none

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

Respiratory protection: Ensure adequate ventilation.
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Filter type: A

Eye protection: Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Body protection: Wear suitable protective clothing.

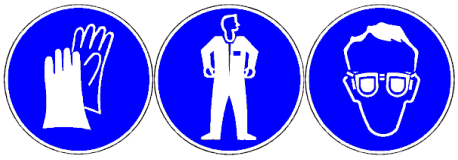
Hand protection:

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.

Other protection:

The selection of PPE shall at least compliant with "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" and "Code of practice for selection of personal protective equipments" (GB/T 11651-2008).
Good industrial hygiene practices should be observed.

Pictograms for recommended PPE:



9. Physical and chemical properties

Physical state:	liquid	Appearance:	blue liquid
pH:	Not applicable	Melting point:	Not available.
Boiling point:	> 149 °C (> 300.2 °F)	Density:	1.1 g/cm3
Flash point:	> 93.3 °C (> 199.94 °F)	Ignition temperature:	Not available.
Solubility in water	Slightly soluble	Viscosity:	800 - 1,600 mPa.s

10. Stability and reactivity

Conditions to avoid:

Stable under normal conditions of storage and use.

Incompatible products:

Strong oxidizing agents.
Free radical initiators.
Strong reducing agents.
Alkalis.
Oxygen scavengers.
Other polymerization initiators.
Copper.
Iron.
Zinc.
Aluminum.
Rust.

Decomposition products:

None if used for intended purpose.

Hazardous polymerization:

Will not occur.

11. Toxicological information

Oral toxicity:
Acute toxicity estimate (ATE) : > 5,000 mg/kg
Method: Calculation method

Inhalative toxicity:
Acute toxicity estimate (ATE) : > 40 mg/l
Exposure time: 4 h
Test atmosphere: Vapor.
Method: Calculation method

Dermal toxicity:
Acute toxicity estimate (ATE) : > 5,000 mg/kg
Method: Calculation method

Other remarks:
Not available.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	
Titanium dioxide 13463-67-7	LD50 LC50 LD50	> 5,000 mg/kg > 6.82 mg/l >= 10,000 mg/kg	oral inhalation dermal	4 h	rat rat hamster	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
Titanium dioxide 13463-67-7	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
Titanium dioxide 13463-67-7	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Titanium dioxide 13463-67-7	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	
Titanium dioxide 13463-67-7	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		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Titanium dioxide 13463-67-7	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	
Titanium dioxide 13463-67-7	NOAEL=24,000 mg/kg	oral: gavage	29 ddaily	rat	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

12. Ecological information

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

Ecotoxicity:
No data available.

Other adverse effects:
Not available.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Cumene hydroperoxide 80-15-9	LC50	3.9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3.1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		
Titanium dioxide 13463-67-7	LC50	> 1,000 mg/l	Fish	48 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Titanium dioxide 13463-67-7	EC50	> 1,000 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Titanium dioxide 13463-67-7	EC0	> 10,000 mg/l	Bacteria	24 h	Pseudomonas fluorescens	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test)
1,4-Naphthalenedione 130-15-4	EC50	0.011 mg/l	Algae	72 h	Dunaliella bioculata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
1,4-Naphthalenedione 130-15-4		no data	0 - 60 %	OECD 301 A - F

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Cumene hydroperoxide 80-15-9		9.1		calculation		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Cumene hydroperoxide 80-15-9	2.16					
1,4-Naphthalenedione 130-15-4	1.71					

13. Disposal considerations

Product disposal: If the waste is classified as hazardous waste according to GB 5085.7-2007 (Identification standards for hazardous wastes,General Specifications).Dispose of as hazardous waste in compliance with "Regulation on the Safety Management of Hazardous Chemicals","Law of thePeople's Republic of China on the prevention and control of Environmental Pollution by Solid Waste", "National Catalogue of Hazardous Waste".

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

General information:
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

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” (Adopted by the 28th meeting of 9th NPC standing committee on 29th June 2002, revised by 10th meeting of 12nd NPC standing committee on 31st Aug 2014).
“Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases” (Adopted by the 24th meeting of 9th NPC standing committee on 27th October 2001, revised by 24th meeting of 11st NPC standing committee on 31st Dec 2011).
“Law of the People's Republic of China on environmental protection” (Adopted by 11st meeting of 7th NPC standing committee on 26th December 1989, revised by 8th meeting of 12nd NPC standing committee on 24th Apr 2014).
“Regulation on the Safety Management of Hazardous Chemicals” (Adopted by 144th State Council executive meeting on 16th February 2011).
“Regulations on License to Work Safety” (Adopted by 54th State Council executive meeting on 29th July 2014).

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: 06.06.2018
Issue department: Dayong Tian, Product Safety & Regulatory Affairs Specialist for Greater China

Disclaimer:

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.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic 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.
H410 Very toxic to aquatic life with long lasting effects.