



## Safety Data Sheet

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LOCTITE 272 THREADLOCKER 50ML

SDS No. : 153465

V001.2

Revision: 10.12.2019

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### SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product name:** LOCTITE 272 THREADLOCKER 50ML

**Intended use:** Anaerobic Adhesive

**Supplier:**  
Henkel New Zealand Ltd  
2 Allens Rd  
Auckland, 2013  
New Zealand  
Phone: +64 (9) 272-6710

**Emergency information:** 24 HOUR EMERGENCY CONTACT NUMBER 0800 243 622

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Classified as hazardous according to the criteria of the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017  
Not Classified as Dangerous Goods according to NZS 5433: 2012 and the Land Transport Rule: Dangerous Goods 2005.

#### GHS Classification:

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Target organ</u>
Serious eye irritation	Category 2A	
Skin sensitizer	Category 1	
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

<b>Hazard statement(s):</b>	H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary Statement(s):</b>	
<b>Prevention:</b>	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. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/eye protection.
<b>Response:</b>	P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P363 Wash contaminated clothing before reuse.
<b>Storage:</b>	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
<b>Disposal:</b>	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

### 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
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione	3006-93-7	10- < 30 %
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	1- < 10 %
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide	80-15-9	1- < 3 %
maleic acid	110-16-7	0.1- < 1 %
Acetic acid, 2-phenylhydrazide	114-83-0	< 1 %
non hazardous ingredients~		60- < 100 %

### SECTION 4 FIRST AID MEASURES

<b>Ingestion:</b>	Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.
<b>Skin:</b>	Rinse with running water and soap. Obtain medical attention if irritation persists.
<b>Eyes:</b>	Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, seek medical advice.
<b>First Aid facilities:</b>	Eye wash

**Medical attention and special treatment:** Treat symptomatically and supportively.

### SECTION 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** Carbon dioxide, foam, powder

**Improper extinguishing media:** High pressure waterjet

**Decomposition products in case of fire:** Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.

**Particular danger in case of fire:** In the event of a fire, carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) can be released.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

**Additional fire fighting advice:** In case of fire, keep containers cool with water spray.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Avoid contact with skin and eyes.  
Ensure adequate ventilation.  
Wear protective equipment.

**Environmental precautions:** Do not empty into drains / surface water / ground water.

**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.  
Dispose of contaminated material as waste according to Section 13.

### SECTION 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid skin and eye contact.  
See advice in section 8

**Conditions for safe 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.

### SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Workplace exposure standards:**

None

**Biological Exposure Indices:**

None

<b>Engineering controls:</b>	Ensure good ventilation/extraction.
<b>Eye protection:</b>	Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
<b>Skin protection:</b>	<p>Wear suitable protective clothing.</p> <p>Chemical-resistant protective gloves (EN 374).</p> <p>Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to &gt; 30 minutes permeation time as per EN 374): nitrile rubber (NBR; &gt;= 0.4 mm thickness)</p> <p>Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to &gt; 480 minutes permeation time as per EN 374): nitrile rubber (NBR; &gt;= 0.4 mm thickness)</p> <p>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.</p>
<b>Respiratory protection:</b>	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

<b>Appearance:</b>	Orange-red liquid
<b>Odor:</b>	characteristic
<b>pH:</b>	3 - 6
<b>Specific gravity:</b>	1.11
<b>Flash point:</b> (Tagliabue closed cup)	> 93.3 °C (> 199.94 °F)
<b>Vapor pressure:</b> (; 80 °F (26.7 °C))	< 5 mm hg
<b>Solubility in water:</b>	Slight
<b>VOC content:</b> (2010/75/EC)	< 3 %

## SECTION 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	No decomposition if stored and applied as directed.
<b>Incompatible materials:</b>	Reducing agents. Strong oxidizing agents.
<b>Hazardous decomposition products:</b>	None known.
<b>Hazardous polymerization:</b>	Hazardous polymerization may occur in the presence of excess peroxides and metals contamination.

## SECTION 11 TOXICOLOGICAL INFORMATION

**Health Effects:**

**Ingestion:** May cause gastrointestinal tract irritation if swallowed.  
**Skin:** May cause allergic skin reaction.  
**Eyes:** Causes serious eye irritation.  
**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
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	Acute toxicity estimate (ATE) LD50 LC50	500 mg/kg > 300 - 2,000 mg/kg 0.055 mg/l	oral oral inhalation	4 h	rat rat	Expert judgement OECD Guideline 423 (Acute Oral toxicity) OECD Guideline 403 (Acute Inhalation Toxicity)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	LD50 LD50	> 2,000 mg/kg > 5,000 mg/kg	oral  dermal		rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) not specified
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	LD50 LD50 Acute toxicity estimate (ATE)	382 mg/kg 530 - 1,060 mg/kg 1,100 mg/kg	oral  dermal dermal		rat rat	other guideline: other guideline: Expert judgement
maleic acid 110-16-7	LD50 LD50	708 mg/kg 1,560 mg/kg	oral  dermal		rat rabbit	not specified not specified
Acetic acid, 2-phenylhydrazide 114-83-0	LD50	270 mg/kg	oral		rat	not specified

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	not corrosive	60 min	Human, EpiDerm™ SIT (EPI-200), Reconstructed Human Epidermis (RHE)	OECD Guideline 431 (In Vitro Skin Corrosion: Reconstructed Human Epidermis (RHE) Test Method)
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	not irritating	60 min	Human, EpiDerm™ SIT (EPI-200), Reconstructed Human Epidermis (RHE)	OECD Guideline 439 (In Vitro Skin Irritation: Reconstructed Human Epidermis (RHE) Test Method)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	not irritating	24 h	rabbit	Draize Test
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	corrosive		rabbit	Draize Test
maleic acid 110-16-7	irritating	24 h	human	Patch Test

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
1,1'-(1,3-phenylene)bis- 1H-pyrrole-2,5-dione 3006-93-7	not irritating		Bovine, cornea, in vitro test	OECD Guideline 437 (BCOP)
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	irritating		rabbit	Draize Test
maleic acid 110-16-7	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
1,1'-(1,3-phenylene)bis- 1H-pyrrole-2,5-dione 3006-93-7	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
maleic acid 110-16-7	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
maleic acid 110-16-7	sensitising	Mouse local lymphnode assay (LLNA)	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
1,1'-(1,3-phenylene)bis- 1H-pyrrole-2,5-dione 3006-93-7	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)
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	negative negative	bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay	with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	negative	oral: gavage		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	negative	dermal		mouse	not specified
maleic acid 110-16-7	negative negative	bacterial reverse mutation assay (e.g Ames test) mammalian cell gene mutation assay	no data with and without		Ames Test OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

**Repeated dose toxicity:**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
1,1'-(1,3-phenylene)bis- 1H-pyrrole-2,5-dione 3006-93-7	NOAEL=15 mg/kg	oral: gavage	42-52 ddaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Methacrylic acid, monoester with propane- 1,2-diol 27813-02-1	NOAEL=300 mg/kg	oral: gavage		rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	not specified
maleic acid 110-16-7	NOAEL= $\geq$ 40 mg/kg	oral: feed	90 ddaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

**SECTION 12. ECOLOGICAL INFORMATION**

**General ecological information:**

Do not empty into drains / surface water / ground water., Cured Loctite products are typical polymers and do not pose any immediate environmental hazards.

**Ecotoxicity:**

Harmful to aquatic life with long lasting effects.

**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	EC50	31.6 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	ErC50	67.898 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	EC10	0.308 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	LC50	493 mg/l	Fish	48 h	Leuciscus idus melanotus	DIN 38412-15
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	EC50	> 143 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	EC50	> 97.2 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	NOEC	> 97.2 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	EC10	1,140 mg/l	Bacteria	16 h		not specified
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	LC50	3.9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	ErC50	3.1 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		not specified
maleic acid 110-16-7	LC50	> 245 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
maleic acid 110-16-7	EC50	42.81 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
maleic acid 110-16-7	EC50	74.35 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic acid 110-16-7	EC10	11.8 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic acid 110-16-7	EC10	44.6 mg/l	Bacteria	18 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshe mm-Test)

**Persistence and degradability:**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	not readily biodegradable.	not specified	0 - < 60 %	OECD Guideline 303 A (Simulation Test Aerobic Sewage Treatment. A: Activated Sludge Units)
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	not readily biodegradable.	aerobic	0 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	readily biodegradable	aerobic	94.2 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
maleic acid 110-16-7	readily biodegradable	aerobic	97.08 %	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
1,1'-(1,3-phenylene)bis-1H-pyrrole-2,5-dione 3006-93-7	0.67				24 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Methacrylic acid, monoester with propane-1,2-diol 27813-02-1	0.97				20 °C	not specified
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9		9.1		calculation		OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide 80-15-9	2.16					not specified
maleic acid 110-16-7	-1.3				20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Acetic acid, 2-phenylhydrazide 114-83-0	0.74					not specified

**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****Dangerous Goods information:**

**Land Transport:** Not Classified as Dangerous Goods according to NZS 5433: 2012 and the Land Transport Rule: Dangerous Goods 2005.

**Marine transport IMDG:**

Not dangerous goods

**Air transport IATA:**

Not dangerous goods

**SECTION 15. REGULATORY INFORMATION**

**New Zealand regulatory information:**

Classified as hazardous according to the criteria of the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**HSNO Approval Number:** Group standard HSR002670

**NZIoC:** Compliant for NZIOC

**SECTION 16. OTHER INFORMATION**

**Abbreviations/acronyms:** IMDG: International Maritime Dangerous Goods code  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

**Reason for issue:** Reviewed SDS. Reissued with new date. involved chapters: 2,3

**Date of previous issue:** 29.02.2016

**Disclaimer:**

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel New Zealand Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel New Zealand Limited concerning the properties of the material.

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