



Safety Data Sheet

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Loctite(R) 510 Gasket Eliminator(R) Flange Sealant

SDS No. : 153499

V001.1

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SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: Loctite(R) 510 Gasket Eliminator(R) Flange Sealant

Intended use: Anaerobic Sealant

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 |

Hazard pictogram:



Signal word:

Warning

| | |
|------------------------------------|--|
| Hazard statement(s): | H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. |
| 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. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves, eye protection, and face protection. |
| Response: | P302+P352 IF ON SKIN: Wash with plenty of water. 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. 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. |
| 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. |

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

General chemical description: Mixture
Type of preparation: Anaerobic Sealant

Identity of ingredients:

| Chemical ingredients | CAS-No. | Proportion |
|---|------------|-------------|
| 1,1'-(methylenedi-p-phenylene)bismaleimide | 13676-54-5 | 1- < 10 % |
| α , α -dimethylbenzyl hydroperoxide | 80-15-9 | 1- < 3 % |
| Propane-1,2-diol | 57-55-6 | < 10 % |
| Acetic acid, 2-phenylhydrazide | 114-83-0 | < 1 % |
| non hazardous ingredients~ | | 60- < 100 % |

SECTION 4 FIRST AID MEASURES

| | |
|------------------------------|--|
| Ingestion: | Do not induce vomiting. Rinse out mouth. Do not drink. Seek medical advice. |
| Skin: | Rinse with running water and soap. Seek medical advice. |
| Eyes: | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice. |
| Inhalation: | Move to fresh air. Seek medical advice. |
| First Aid facilities: | Eye wash and safety shower Normal washroom facilities |

Medical attention and special treatment: Treat symptomatically and supportively.

SECTION 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide, foam, powder

Decomposition products in case of fire: Thermal decomposition can lead to release of irritating gases and vapors. Oxides of carbon, oxides of nitrogen, irritating organic vapors.

Particular danger in case of fire: Do not expose to direct heat.

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 skin and eye contact.
Wear protective equipment.
Ensure adequate ventilation.
See advice in section 8

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.
Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation.
Avoid skin and eye contact.

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:

| Ingredient [Regulated substance] | form of exposure | TWA (ppm) | TWA (mg/m3) | Ceiling | STEL (ppm) | STEL (mg/m3) |
|--|-------------------------|-----------|-------------|---------|------------|--------------|
| PROPANE-1,2-DIOL, PARTICULATES ONLY 57-55-6 | Particulate. | | 10 | - | - | - |
| PROPANE-1,2-DIOL, VAPOUR & PARTICULATES | Vapor and particulates. | 150 | 474 | - | - | - |

Biological Exposure Indices:
None

| | |
|--------------------------------|---|
| Engineering controls: | Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits. |
| Eye protection: | Wear protective glasses. |
| Skin protection: | Wear suitable protective clothing. Suitable protective gloves. Butyl rubber gloves. 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. |
| 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: | Pink Gel |
| Odor: | Mild |
| Specific gravity: | 1.1784 |
| Boiling point: | > 150 °C (> 302 °F) |
| Flash point: | > 93.3 °C (> 199.94 °F) |
| Vapor pressure: (; 27 °C (80.6 °F)) | < 5 mm hg |
| Density: | 1.178 g/cm ³ |
| Solubility in water: | Slightly soluble |
| VOC content: (2010/75/EC) | < 3 % |

SECTION 10. STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | Stable under recommended storage conditions. |
| Conditions to avoid: | Avoid contact with incompatible substances, excessive heat, flames or other ignition sources. |
| Incompatible materials: | Reaction with strong acids. Reacts with strong oxidants. |
| Hazardous decomposition products: | Thermal decomposition can lead to release of irritating gases and vapors. Irritating organic vapours. carbon oxides. Sulphur oxides nitrogen oxides |

SECTION 11 TOXICOLOGICAL INFORMATION

Health Effects:**Ingestion:**

May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Skin:

May cause mild skin irritation.

Eyes:

Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.

Causes serious eye irritation.

Inhalation:

Symptoms may include severe irritation, pain, tearing, blurred vision.

Irritates the nose, throat and respiratory system.

Can cause nausea and respiratory irritation, dizziness, weakness, fatigue, headache, narcosis, loss of appetite and possible unconsciousness.

Acute toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|--|---|--|------------------------------|---------------|-------------------------|--|
| 1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5 | LD50 LC50 LD50 | > 2,000 mg/kg 0.515 - 1 mg/l > 5,400 mg/kg | oral inhalation dermal | 4 h | rat rat rat | OECD Guideline 423 (Acute Oral toxicity) OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class (ATC) Method) not specified |
| α , α -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 |
| Propane-1,2-diol 57-55-6 | LD50 LC50 LD50 | 22,000 mg/kg > 317.042 mg/l > 2,000 mg/kg | oral inhalation dermal | 2 h | rat rabbit rabbit | not specified 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 |
|--|----------------|---------------|---------|--|
| 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 |
|--|----------------|---------------|---------|---|
| 1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5 | not irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| 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 |
|--|-----------------|------------------------------|------------|--|
| 1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5 | sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| 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 |
|---|----------------------------------|---|--|---------------------|---|
| 1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5 | negative | in vitro mammalian cell micronucleus test | with and without | | OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test) |
| 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:

Cured Loctite products are typical polymers and do not pose any immediate environmental hazards., Precautions required with respect to Environmental Hazards of articles in which this product is used should be considered., Do not empty into drains / surface water / ground water.

Ecotoxicity:

Toxic to aquatic organisms, May cause long-term adverse effects in the aquatic environment., 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 |
|---|---------------------------------|-------------------------|---------------|--|
| 1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5 | not readily biodegradable. | aerobic | 0 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| 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 |
|---------------------------------|--------|----------------------------------|------------------|---------|-------------|--------|
|---------------------------------|--------|----------------------------------|------------------|---------|-------------|--------|

| | | | | | | |
|--|-------|-----|--|-------------|---------|--|
| 1,1'-(methylenedi-p-phenylene)bismaleimide 13676-54-5 | 1.5 | | | | 25 °C | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC 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 |
| Propane-1,2-diol 57-55-6 | -1.07 | | | | 20.5 °C | EU Method A.8 (Partition Coefficient) |
| 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.

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: STEL - Short term exposure limit
TWA - Time weighted average
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

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