

# Safety Data Sheet

LOCTITE 510 TT50ML AU

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SDS No. : 153499 V001.2 Revision: 20.03.2024 printing date: 06.01.2025

SECTION 1	IDENTIFICATION OF THE MATERIAL AND SUPPLIER
Product name:	LOCTITE 510 TT50ML AU
Intended use:	Adhesive
Supplier:	Henkel New Zealand Ltd 2 Allens Rd East Tamaki Auckland, 2013 New Zealand Phone: +64 (9) 272-6710

E-mail address of person responsible for Safety Data Sheet: SDS info. A dhe sive @henkel.com

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO). Classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

#### **GHS Classification:**

Hazard Class	Hazard Category	<b>Route of Exposure</b>	Target organ
Acute toxicity	Category 4	Inhalation	
Serious eye irritation	Category 2A		
Skin sensitizer	Category 1		
Target Organ Systemic Toxicant -	Category 3		respiratory tract irritation
Single exposure			
Acute hazards to the aquatic environment	Category 3		
Chronic hazards to the aquatic	Category 1		
environment			
Hazard pictogram:			
Signal word:	Warning		

Hazard statement(s):	H317 May cause an allergic skin reaction.
	H319 Causes serious eye irritation.
	H332 Harmful if inhaled.
	H335 May cause respiratory irritation.
	H402 Harmful to aquatic life.
	H410 Very toxic to aquatic life with long lasting effects.
Precautionary Statement(s):	
Prevention:	P261 Avoid breathing mist/vapours.
	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, 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.
	P362+P364 Take off contaminated clothing and wash it before reuse.
	P391 Collect spillage.
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:	Anaerobi

# Anaerobic Sealant

### Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
1,1'-(methylenedi-p-phenylene)bismaleimide	13676-54-5	1- < 10 %
Silica, amorphous, fumed, crystfree	112945-52-5	1- < 10 %
$\alpha$ , $\alpha$ -dimethylbenzyl hydroperoxide	80-15-9	1-< 3%
Propane-1,2-diol	57-55-6	1- < 10 %
Acetic acid, 2-phenylhydrazide	114-83-0	0.1-< 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:

SDS No.: 153499

V001.2

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Ceiling	STEL (ppm)	STEL (mg/m3)
Particulates not otherwise classified, respirable dust Respirable dust (not otherwise classified) 112945-52-5	Respirable dust.		3	-	-	-
Particulates not otherwise classified, inhalable dust Inhalable dust (not otherwise classified)	Inhalable dust.		10	-	-	-
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: pH: Melting point / freezing point: Specific gravity:	Acrylic Not applicable, Product is non-soluble (in water). Not applicable, Product is a liquid 1.178
Boiling point: Flash point: (Estimated)	> 150 °C (> 302 °F) > 93 °C (> 199.4 °F)
Vapor pressure: (; 27 °C (80.6 °F)no method / method unknown; 50 °C (122 °F); 20 °C (68 °F))	< 5 mm hg < 300 mbar < 10 hPa
Vapor density:	>1
Density: Solubility in water: Viscosity (dynamic):	1.178 g/cm3 Slightly soluble 40,000 - 140,000 mPa.s(; 25 °C (77 °F); Method: ;; LCT STM 10; Viscosity Brookfield)200,000 - 750,000 mPa.s(; 20 °C (68 °F); Method: ;; LCT STM 10;

Viscosity Brookfield)

**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

Ingestion:	May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Skin:	May cause mild skin irritation.
	Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals.
Eyes:	Causes serious eye irritation.
	Symptoms may include severe irritation, pain, tearing, blurred vision.
Inhalation:	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	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
1,1'-(methylenedi-p-	LD50	> 2,000 mg/kg	oral		rat	OECD Guideline 423 (Acute
phenylene)bismaleimide	LC50	0.515 - 1 mg/l	inhalation	4 h	rat	Oral toxicity)
13676-54-5	Acute	0.515 mg/l	inhalation			OECD Guideline 436 (Acute
	toxicity	> 5,400 mg/kg	dermal		rat	Inhalation Toxicity: Acute
	estimate					Toxic Class (ATC) Method)
	(ATE)					Expert judgement
	LD50					not specified
Silica, amorphous, fumed,	LD50	> 5,000 mg/kg	oral		rat	OECD Guideline 401 (Acute
crystfree	LC0	0.139 mg/l	inhalation	4 h	rat	Oral Toxicity)
112945-52-5	LD50	> 2,000 mg/kg	dermal		rabbit	not specified
						OECD Guideline 402 (Acute
						Dermal Toxicity)
α, α-dimethylbenzyl	LD50	382 mg/kg	oral		rat	other guideline:
hydroperoxide	LC50	1.370 mg/l	inhalation	4 h	rat	not specified
80-15-9	Acute	1,100 mg/kg	dermal			Expert judgement
	toxicity					
	estimate					
	(ATE)					
Propane-1,2-diol	LD50	22,000 mg/kg	oral		rat	not specified
57-55-6	LC50	> 317.042 mg/l	inhalation	2 h	rabbit	not specified
	LD50	> 2,000 mg/kg	dermal		rabbit	not specified
Acetic acid, 2-	LD50	270 mg/kg	oral		rat	not specified
phenylhydrazide		2.0				-
114-83-0						

### Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Silica, amorphous, fumed, crystfree 112945-52-5	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
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)
Silica, amorphous, fumed, crystfree 112945-52-5	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 maximisat ion test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Propane-1,2-diol 57-55-6	not sensitising	Guinea pig maximisat ion 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)
Silica, amorphous, fumed, crystfree 112945-52-5	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro			not specified not specified not specified
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

#### General ecological information:

Do not empty into drains / surface water / ground water.

#### **Ecotoxicity:**

H402 Harmful to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

## Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	LC50	Toxicity > Water solubility	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	NOEC	0.043 mg/l	Fish	33 d	Pimephales promelas	OECD Guideline 210 (fish early lite stage toxicity test)
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	EC50	Toxicity > Water solubility	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	NOEC	Toxicity > Water solubility	Algae	72 h	Pseudokirchneriella subcapitata	Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	EC50	Toxicity > Water solubility	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,1'-(methylenedi-p- phenylene)bismaleimide 13676-54-5	EC50	Toxicity > Water solubility	Bacteria	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Silica, amorphous, fumed, crystfree 112945-52-5	LC50	> 10,000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
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	18.84 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
α, α-dimethylbenzyl hydroperoxide 80-15-9	EC50	3.1 mg/l	Algae	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	Algae	72 h	Desmodesmus subspicatus (reported as Scenedesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
α, α-dimethylbenzyl hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min	not specified	not specified
Propane-1,2-diol 57-55-6	LC50	51,600 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
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	Result	Route of	Degradability	Method
CAS-No.		application		

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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	not readily biodegradable.	aerobic	3 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Propane-1,2-diol 57-55-6	readily biodegradable	aerobic	> 81.7 - 100 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry 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	1.6				25 °C	OECD Guideline 117 (Partition Coefficient (n- octanol / water), HPLC Method)
Propane-1,2-dio1 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

SECTIO	DN 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:

Classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

#### Land Transport:

UN no.: Proper shipping name:	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
Class or division:	N.O.S. (1,1'-(Methylenedi-p-phenylene)bismaleimide)
	y III
Packing group:	111
Marine transport IMDG:	
UN no.:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
1 11 0	N.O.S. (1,1'-(Methylenedi-p-phenylene)bismaleimide)
Class or division:	9
Packing group:	III
EmS:	F-A,S-F
Seawater pollutant:	Marine pollutant
Air transport IATA:	
UN no.:	3082
Proper shipping name:	Environmentally hazardous substance, liquid, n.o.s. (1,1'-
	(Methylenedi-p-phenylene)bismaleimide)
Class or division:	9
Packing group:	III
Packing instructions (passenger)	964

#### **Further information for transport:**

Packing instructions (cargo)

The transport classifications in this section apply generally to packed and bulk goods alike. For containers with a net volume of no more than 5 L for liquid substances or a net mass of no more than 5 kg for solid substances per individual or inner package, the exemptions SP 375 (ADR), A197 (IATA), 2.10.2.7 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

### SECTION 15. REGULATORY INFORMATION

#### New Zealand regulatory information:

Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

964

HSNO Approval Number:	Group standard HSR002670
NZIoC:	All components are listed or are exempt from listing on the New Zealand Inventory of Chemicals (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

Reason for issue:	Reviewed SDS. Reissued with new date. involved chapters: 1-16
Date of previous issue:	09.01.2020
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. The information contained in this Safety Data Sheet is offered in good faith and has been developed from what is believed to be accurate and reliable sources. The information is offered without warranty, representation, inducement or licence and Henkel New Zealand Limited assumes no legal responsibility for reliance upon same. Henkel New Zealand Limited disclaims any liability for loss, injury or damage incurred in connection with the use of the material or its associated Safety Data Sheet. This information is not to be construed as a representation that the material is suitable for any particular purpose or use except those conditions and warranties implied by Government statutes. Customers are encouraged to make their own enquiries as to the material's characteristics and, where appropriate, to conduct their own tests in the specific context of the material's intended use. 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.