



Safety Data Sheet

LOCTITE 242

Page 1 of 12

SDS No. : 150233

V001.7

Date of issue: 21.03.2024

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

Product name: LOCTITE 242

Supplier:

Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

E-mail address of person responsible for Safety Data Sheet: SDSinfo.Adhesive@henkel.com

Emergency Telephone for Chemical Accidents: 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

Section 2. Hazards identification

Classification of the substance or mixture

Hazardous according to the criteria of Safe Work Australia.

GHS Classification:

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Target organ</u>
Skin irritation	Category 2	
Serious eye irritation	Category 2A	
Target Organ Systemic Toxicant - Single exposure	Category 3	respiratory tract irritation
Acute hazards to the aquatic environment	Category 2	

Hazard pictogram:



Signal word: Warning

Hazard statement(s):	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H401 Toxic to aquatic life.
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. 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. P332+P313 If skin irritation 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.
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.

Dangerous Goods information:

Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Section 3. Composition / information on ingredients

General chemical description: Mixture
Type of preparation: Anaerobic Sealant

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Silica, amorphous, fumed, cryst.-free	112945-52-5	< 10 %
α , α -dimethylbenzyl hydroperoxide	80-15-9	1- < 3 %
Propane-1,2-diol	57-55-6	< 10 %
N,N-Diethyl-p-toluidine	613-48-9	< 10 %
methacrylic acid	79-41-4	< 1 %
non hazardous ingredients~		60- <= 100 %

Section 4. First aid measures

Ingestion:	Do not induce vomiting. Have victim rinse mouth thoroughly with water. Seek medical advice.
Skin:	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Seek medical advice.
Eyes:	Wash with plenty of water immediately and continue for several minutes, holding eyelid open. Consult a doctor.
Inhalation:	Move to fresh air in case of accidental inhalation of vapours. 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.
carbon monoxide
Carbon dioxide.
Oxides of nitrogen.
Oxides of sulfur.

Special protective equipment for fire-fighters: Wear full protective clothing.
Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

Additional fire fighting advice: In case of fire, keep containers cool with water spray.
Collect contaminated fire fighting water separately. It must not enter drains.

Section 6. Accidental release measures

Personal precautions: Avoid skin and eye contact.
Danger of slipping on spilled product.
Wear protective equipment.
Ensure adequate ventilation.
Use personal protective equipment as described in Section 8.

Environmental precautions: Waste disposal with the approval of the responsible local authority.
Do not discharge into surface water/ground water.

Clean-up methods: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Scrape up spilled material and place in a closed container for disposal.

Section 7. Handling and storage

Precautions for safe handling: Use only in well-ventilated areas.
Avoid skin and eye contact.
Wear suitable protective clothing, safety glasses and gloves.

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.

Unsuitable materials with product: plastic

Section 8. Exposure controls / personal protection

National exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Peak Limit. (ppm)	Peak Limit. (mg/m3)	STEL (ppm)	STEL (mg/m3)
SILICA, AMORPHOUS: FUMED SILICA (RESPIRABLE DUST) 112945-52-5	Respirable dust.		2				
Nuisance dusts, inhalable dust 112945-52-5	Inhalable dust.		10				
PROPANE-1,2-DIOL TOTAL: (VAPOUR & PARTICULATES) 57-55-6	Total vapour and particulates.	150	474				
PROPANE-1,2-DIOL: PARTICULATES ONLY 57-55-6	Particulate.		10				
METHACRYLIC ACID 79-41-4		20	70				

Engineering controls:

Ensure good ventilation/suction at the workplace.

Eye protection:

Wear protective glasses.
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:

Wear suitable protective clothing.
Recommended gloves include butyl rubber and neoprene.
Use chemical resistant, impervious gloves and clothing to prevent skin contact.
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:

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:	blue liquid
Odor:	mild, Acrylic
pH:	Not applicable, Product is non-polar/aprotic.
Melting point / freezing point:	Not applicable, Product is a liquid
Specific gravity:	1.1
Boiling point:	> 150 °C (> 302 °F)
Flash point:	> 100 °C (> 212 °F)
(Tagliabue closed cup)	
Lower explosive limit:	2.6 % (V) (propylene glycol)
Upper explosive limit:	12.5 % (V) (propylene glycol)
Vapor pressure:	< 6.67 mbar
(; 27 °C (80.6 °F); 20 °C (68 °F))	< 0.13 mbar
Vapor density:	> 1
Density:	1.1 g/cm ³
Viscosity (dynamic):	800 - 1,600 mPa.s (BROOKFIELD WITH HELIPATH; Instrument: RVF, HELIPATH; 25 °C (77 °F); speed of rotation: 20 min ⁻¹ ; Spindle No: 3; Method: ; LCT STM 10; Viscosity Brookfield)
VOC content:	0.56 % 6.17 g/l

Section 10. Stability and reactivity

Stability:	Stable under normal conditions of temperature and pressure.
Conditions to avoid:	Avoid excessive heat and ignition sources. Extremes of temperature.
Incompatible materials:	Strong oxidizing agents. Acids and bases. Reducing agents.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors. carbon monoxide Carbon dioxide. Oxides of sulfur. Oxides of nitrogen.
Hazardous polymerization:	Will not occur.

Section 11. Toxicological information

Health Effects:	
Ingestion:	May cause mild gastrointestinal irritation with nausea, vomiting, diarrhea and abdominal pain.
Skin:	Causes skin irritation.
Eyes:	Causes serious eye irritation. Symptoms may include severe irritation, pain, tearing, blurred vision.
Inhalation:	Causes respiratory tract irritation. Vapors may cause irritation of the nose, throat, and respiratory tract.
Skin irritation:	Result: Category 2 (irritant)
Eye irritation:	Result: Category 2A (irritating to eyes)

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Silica, amorphous, fumed, cryst.-free 112945-52-5	LD50 LC0 LD50	> 5,000 mg/kg 0.139 mg/l > 2,000 mg/kg	oral inhalation dermal	4 h	rat rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) not specified OECD Guideline 402 (Acute Dermal Toxicity)
α , α -dimethylbenzyl hydroperoxide 80-15-9	LD50 LC50 Acute toxicity estimate (ATE)	382 mg/kg 1.370 mg/l 1,100 mg/kg	oral inhalation dermal	4 h	rat rat	other guideline: not specified 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
N,N-Diethyl-p-toluidine 613-48-9	Acute toxicity estimate (ATE) Acute toxicity estimate (ATE) Acute toxicity estimate (ATE)	100 mg/kg 3 mg/l 300 mg/kg	oral inhalation dermal			Expert judgement Expert judgement Expert judgement
methacrylic acid 79-41-4	LD50 LC50 Acute toxicity estimate (ATE) LD50 Acute toxicity estimate (ATE)	1,320 mg/kg > 3.6 mg/l 3.61 mg/l 500 - 1,000 mg/kg 500 mg/kg	oral inhalation inhalation dermal dermal	4 h	rat rat rabbit	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity) Expert judgement Dermal Toxicity Screening Expert judgement

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Silica, amorphous, fumed, cryst.-free 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)
N,N-Diethyl-p-toluidine 613-48-9	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
methacrylic acid 79-41-4	corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Silica, amorphous, fumed, cryst.-free 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)
methacrylic acid 79-41-4	corrosive		rabbit	Draize Test

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Propane-1,2-diol 57-55-6	not sensitising	Guinea pig maximisation test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)
methacrylic acid 79-41-4	not sensitising	Buehler 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
Silica, amorphous, fumed, cryst.-free 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
methacrylic acid 79-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
methacrylic acid 79-41-4	negative negative	inhalation oral: gavage		mouse mouse	equivalent or similar to OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test) equivalent or similar to 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
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
methacrylic acid 79-41-4		inhalation	90 d6 h/d, 5 d/w	rat	OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

Section 12. Ecological information

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

Ecotoxicity:

H401 Toxic to aquatic life.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Silica, amorphous, fumed, cryst.-free 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)
N,N-Diethyl-p-toluidine 613-48-9	LC50	78.62 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
N,N-Diethyl-p-toluidine 613-48-9	EC50	10.34 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
N,N-Diethyl-p-toluidine 613-48-9	EC50	7.42 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
N,N-Diethyl-p-toluidine 613-48-9	EC50	23.69 mg/l	Algae	72 h	Raphidocelis subcapitata (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	LC50	85 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
methacrylic acid 79-41-4	NOEC	10 mg/l	Fish	35 d	Danio rerio	OECD Guideline 210 (fish early lite stage toxicity test)
methacrylic acid 79-41-4	EC50	> 130 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
methacrylic acid 79-41-4	NOEC	8.2 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
methacrylic acid 79-41-4	EC50	45 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

methacrylic acid 79-41-4	EC10	100 mg/l	Bacteria	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshe- mm-Test)
-----------------------------	------	----------	----------	------	--------------------	---

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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)
N,N-Diethyl-p-toluidine 613-48-9	not readily biodegradable.	not specified	1 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
methacrylic acid 79-41-4	readily biodegradable	aerobic	86 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
methacrylic acid 79-41-4	inherently biodegradable	aerobic	100 %	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	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-diol 57-55-6	-1.07				20.5 °C	EU Method A.8 (Partition Coefficient)
N,N-Diethyl-p-toluidine 613-48-9	3.7					QSAR (Quantitative Structure Activity Relationship)
methacrylic acid 79-41-4	0.93				22 °C	OECD Guideline 107 (Partition Coefficient (n- octanol / water), Shake Flask Method)

Section 13. Disposal considerations

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

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

Road and Rail Transport:

Dangerous Goods information: Not classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Marine transport IMDG:

Not dangerous goods

Air transport IATA:

Not dangerous goods

Section 15. Regulatory information

SUSMP Poisons Schedule None

AIC: All components are listed or are exempt from listing on the Australian Inventory of Industrial Chemicals or Introduced under AICIS.

Section 16. Other information

Abbreviations/acronyms: ADGC - Australian Dangerous Goods Code
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
OECD: Organization for Economic Cooperation and Development
LD 50: Lethal Dose 50%
LC 50: Lethal Concentration 50%
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
AIC - Australian Inventory of Industrial Chemicals (AIC)
AICIS - Australian Industrial Chemicals Introduction Scheme

Reason for issue: Reviewed SDS. Reissued with new date. involved chapters: 1-16

Date of previous issue: 18.09.2020

Disclaimer:

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel Australia Pty. 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 Australia Pty. Limited concerning the properties of the material.

The information contained in the 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 Australia Pty. Limited assumes no legal responsibility for reliance upon same. Henkel Australia Pty. 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 either Commonwealth or State 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.