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

Product name: LOCTITE® 263™ THREADLOCKER

Intended use: Anaerobic Adhesive

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:

Hazard Class	Hazard Category	Target organ
Skin irritation	Category 2	
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 2	
Chronic hazards to the aquatic environment	Category 2	

Hazard pictogram:



Signal word: Warning

Hazard statement(s):	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H411 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.

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).
Exempt under Special Provision AU01 : Environmentally Hazardous Substances meeting the descriptions of UN3077 or UN3082 are not subject to this Code when transported by road or rail in;
a) Packagings that do not incorporate a receptacle exceeding 500 kg (L); or
b) Intermediate Bulk Containers.

Section 3. Composition / information on ingredients

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
3,3,5 Trimethylcyclohexyl methacrylate	7779-31-9	30- < 60 %
2,2'-Ethylenedioxydiethyl dimethacrylate	109-16-0	1- < 10 %
[2-[(2-Methyl-1-oxoallyl)oxy]ethyl] hydrogen maleate	51978-15-5	< 1 %
maleic anhydride	108-31-6	0.001- < 0.1 %
non hazardous ingredients~		30- <= 60 %

Section 4. First aid measures

Ingestion:	Rinse out mouth, drink 1-2 glasses of water, do not induce vomiting. Seek medical advice.
Skin:	Rinse with running water and soap. Seek medical advice.
Eyes:	Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.
Inhalation:	Move to fresh air. If symptoms persist, seek medical advice.

First Aid facilities: Eye wash and safety shower
Normal washroom facilities

Medical attention and special treatment: Treat symptomatically.

Section 5. Fire fighting measures

Suitable extinguishing media: water, carbon dioxide, foam, powder

Improper extinguishing media: High pressure waterjet

Particular danger in case of fire: In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) 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.
Wear protective equipment.
Ensure adequate ventilation.
Keep away from sources of ignition.
See advice in section 8

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

Clean-up methods: Dispose of contaminated material as waste according to Section 13.
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: Avoid skin and eye contact.
See advice in section 8

Conditions for safe storage: Storage at 8 to 28°C is recommended.

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)
MALEIC ANHYDRIDE 108-31-6		0.25	1				

Eye protection:	Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.
Skin protection:	Wear suitable protective clothing. Suitable protective gloves.
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:	Red liquidRed Liquid
Odor:	AcrylicAcrylic
pH:	Not applicable, Product is non-polar/aprotic.
Specific gravity:	> 0.100
Boiling point:	> 150 °C (> 302 °F)
Flash point:	150 °C (302 °F)
Vapor pressure:	< 2.8 mbar
(; 50 °C (122 °F); 20 °C (68 °F))	< 0.13 mbar
Vapor density:	1
Density:	1.10 g/ml
Viscosity (dynamic):	440.0 - 560.0 mPa.s(Brookfield; Instrument: RVT; 25 °C (77 °F); speed of rotation: 20 min-1; Spindle No: 2; Method: ;; LCT STM 10; Viscosity Brookfield)

Section 10. Stability and reactivity

Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Stable under normal conditions of storage and use.
Incompatible materials:	Reacts with strong oxidants. Acids. Reducing agents. Strong bases.
Hazardous decomposition products:	carbon oxides. Hydrocarbons nitrogen oxides Rapid polymerisation may generate excessive heat and pressure.

Section 11. Toxicological information

Health Effects:

Ingestion: May cause irritation of the stomach

Skin: Causes skin irritation.
May cause skin sensitization.

Eyes: Causes serious eye irritation.

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	LD0 LD50 LD0 LD50	> 5,000 mg/kg > 5,000 mg/kg > 2,000 mg/kg > 2,000 mg/kg	oral oral dermal dermal		rat rat rat rat	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LD50 Acute toxicity estimate (ATE) Acute toxicity estimate (ATE)	10,837 mg/kg 28.17 mg/l > 5,000 mg/kg	oral inhalation dermal		rat	not specified Expert judgement Expert judgement
maleic anhydride 108-31-6	LD50 LD50	1,090 mg/kg 2,620 mg/kg	oral dermal		rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) not specified

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating	24 h	rabbit	Draize Test
maleic anhydride 108-31-6	highly irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
maleic anhydride 108-31-6	corrosive		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
maleic anhydride 108-31-6	sensitising	Guinea pig maximisation test	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
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	negative negative negative	mammalian cell gene mutation assay bacterial reverse mutation assay (e.g Ames test) in vitro mammalian cell micronucleus test	with and without with and without with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 487 (In vitro Mammalian Cell Micronucleus Test)
maleic anhydride 108-31-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
maleic anhydride 108-31-6	negative	inhalation		rat	OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	NOAEL=1,000 mg/kg	oral: gavage	28 ddaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOAEL=1,000 mg/kg	oral: gavage	daily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
maleic anhydride 108-31-6	NOAEL=40 mg/kg	oral: feed	90 ddaily	rat	not specified

Section 12. Ecological information

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

Ecotoxicity: H411 Toxic to aquatic life with long lasting effects.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	LC50	1.9 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	EC50	14.43 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	EC10	0.43 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	LC50	16.4 mg/l	Fish	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	EC50	> 100 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	NOEC	18.6 mg/l	Algae	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic anhydride 108-31-6	LC50	75 mg/l	Fish	96 h	Lepomis macrochirus	OECD Guideline 203 (Fish, Acute Toxicity Test)
maleic anhydride 108-31-6	EC50	77 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
maleic anhydride 108-31-6	EC50	29 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic anhydride 108-31-6	EC10	23 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
maleic anhydride 108-31-6	EC10	44.6 mg/l	Bacteria		Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm-Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	not readily biodegradable.	aerobic	16.8 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	readily biodegradable	aerobic	85 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
maleic anhydride 108-31-6	readily biodegradable	aerobic	98 %	OECD Guideline 301 E (Ready biodegradability: Modified OECD Screening Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method

3,3,5 Trimethylcyclohexyl methacrylate 7779-31-9	5.25				20 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
2,2'-Ethylenedioxydiethyl dimethacrylate 109-16-0	2.3					OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
maleic anhydride 108-31-6	-2.61				19.8 °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: 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).
Exempt under Special Provision AU01 : Environmentally Hazardous Substances meeting the descriptions of UN3077 or UN3082 are not subject to this Code when transported by road or rail in;
a) Packagings that do not incorporate a receptacle exceeding 500 kg (L); or
b) Intermediate Bulk Containers.

Marine transport IMDG:

UN no.: 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3,3,5-Trimethylcyclohexyl methacrylate)
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. (3,3,5-Trimethylcyclohexyl methacrylate)
Class or division:	9
Packing group:	III
Packing instructions (passenger)	964
Packing instructions (cargo)	964

Further information for transport:

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), NZ 4.3(10) may be applied, which can result in a deviation from the transport classification for packed goods.

Section 15. Regulatory information

SUSMP Poisons Schedule None

Section 16. Other information

Abbreviations/acronyms:

ADGC - Australian Dangerous Goods Code
SUSMP - Standard for the Uniform Medicines of Medicines and Poisons
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
AIIC - Australian Inventory of Industrial Chemicals (AIIC)
AICIS - Australian Industrial Chemicals Introduction Scheme

Reason for issue: First issue. involved chapters: 1-16

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.
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