



Safety Data Sheet

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LOCTITE 518 FLANGE SEALANT/ GASKET MAKER known as
518 FLANGE SEALANT 300 ML A/P

MSDS-No. : 153476

V001.3

Date of issue: 19.11.2015

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

Product name: LOCTITE 518 FLANGE SEALANT/ GASKET MAKER known as 518 FLANGE SEALANT 300 ML A/P

Intended use: Anaerobic Adhesive

Supplier:

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

Phone: +61 (3) 9724 6444

Emergency information: 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

Skin irritation
Serious eye damage/eye irritation
Target Organ Systemic Toxicant -
Single exposure
Chronic hazards to the aquatic
environment

Hazard Category

Category 2
Category 1
Category 3
Category 3

Target organ

respiratory tract irritation

Hazard pictogram:



Signal word:

Danger

Hazard statement(s):	H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects.
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. P280 Wear protective gloves/protective clothing/eye protection/face protection. P273 Avoid release to the environment.
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+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention. P332+P313 If skin irritation occurs: Get medical advice/attention. P362 Take off contaminated clothing.
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.

Classification of material Xi - Irritant

Risk phrases:

R37/38 Irritating to respiratory system and skin.
R41 Risk of serious damage to eyes.

Safety phrases:

S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water and soap.
S37/39 Wear suitable gloves and eye/face protection.
S46 If swallowed, seek medical advice immediately and show this container or label.

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).

Signal word:

HAZARDOUS

Section 3. Composition / information on ingredients
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General chemical description: Mixture

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Acrylic acid	79-10-7	< 5 %
Cumene hydroperoxide	80-15-9	< 3 %
Ethane-1,2-diol	107-21-1	< 3 %
non hazardous ingredients~		60- 100 %

Section 4. First aid measures

Ingestion:	Rinse mouth, do not induce vomiting, consult a doctor.
Skin:	Immediately wash skin thoroughly with soap and water. Seek medical advice.
Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes. Immediate medical treatment necessary.
Inhalation:	Move to fresh air, consult doctor if complaint persists.
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:	Foam, dry chemical or carbon dioxide.
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:	Remove sources of ignition. Avoid skin and eye contact. Wear protective equipment. Ensure adequate ventilation.
Environmental precautions:	Do not empty into drains / surface water / ground water.
Clean-up methods:	Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up. Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

- Precautions for safe handling:** See advice in section 8
Use only in well-ventilated areas.
Avoid skin and eye contact.
Wear protective equipment.
- Conditions for safe storage:** Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.
Store below 100°F (38°C).

Section 8. Exposure controls / personal protection**National exposure standards:**

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m ³)	Peak Limit. (ppm)	Peak Limit. (mg/m ³)	STEL (ppm)	STEL (mg/m ³)
FUMED SILICA (RESPIRABLE FRACTION) 112945-52-5	Respirable fraction.		2	-	-	-	-
ACRYLIC ACID 79-10-7		2	5.9	-	-	-	-
ETHYLENE GLYCOL (VAPOUR) 107-21-1	Vapor.	20	52	-	-	-	-
ETHYLENE GLYCOL (VAPOUR) 107-21-1	Vapor.	-	-	-	-	40	104
ETHYLENE GLYCOL (PARTICULATE) 107-21-1	Particulate.		10	-	-	-	-

- Engineering controls:** Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.
- Eye protection:** For eye protection, use tightly fitted safety goggles and a face-shield
- Skin protection:** Use of an impervious apron is recommended.
Suitable protective gloves.

Recommended gloves include butyl rubber and neoprene.

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

- Specific gravity:** 1.1
Boiling point: > 150 °C (> 302 °F)
Flash point: > 100.00 °C (> 212 °F)
(Tagliabue closed cup)
Lower explosive limit: 2 % (V)
(Acrylic Acid)
Upper explosive limit: 8 % (V)
(Acrylic Acid)
Vapor pressure: < 10 mm hg

(; 27 °C (80.6 °F))

Density:

1.1 g/cm³

Solubility in water:

Slightly soluble

VOC content:

< 5 %

(2010/75/EC)

Section 10. Stability and reactivity

Stability:

Stable under normal conditions of temperature and pressure.

Conditions to avoid:

Excessive heat.

Incompatible materials:

Oxidizing agents.
Aldehydes.
Reducing agents.
Reaction with strong acids.

Hazardous decomposition products:

Thermal decomposition can lead to release of irritating gases and vapors.

Carbon monoxide.
Carbon dioxide.
nitrogen oxides
Sulphur oxides

Section 11. Toxicological information

Health Effects:**Ingestion:**

May cause gastrointestinal disturbances.

Ingestion of large quantities may cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Skin:

Causes skin irritation.

Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Eyes:

Causes serious eye damage.

Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Inhalation:

This product is irritating to the respiratory system.

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
Acrylic acid 79-10-7	LD50 LC50 Acute toxicity estimate (ATE) Acute toxicity estimate (ATE) LD50	1,500 mg/kg > 5.1 mg/l 11 mg/l 1,100 mg/kg > 2,000 mg/kg	oral inhalation inhalation dermal dermal	4 h	rat rat rabbit	BASF Test OECD Guideline 403 (Acute Inhalation Toxicity) Expert judgement Expert judgement OECD Guideline 402 (Acute Dermal Toxicity)
Cumene hydroperoxide 80-15-9	LD50	550 mg/kg	oral		rat	
Ethane-1,2-diol 107-21-1	Acute toxicity estimate (ATE) LD50	500 mg/kg > 2,000 mg/kg	oral oral		rat	Expert judgement EU Method B.1 (Acute Toxicity (Oral))

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	highly corrosive	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Cumene hydroperoxide 80-15-9	corrosive		rabbit	Draize Test

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Acrylic acid 79-10-7	corrosive	21 d	rabbit	BASF Test

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Acrylic acid 79-10-7	not sensitising	Skin painting test	guinea pig	
Ethane-1,2-diol 107-21-1	not sensitising	Guinea pig maximisa- tion 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
Acrylic acid 79-10-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		
Cumene hydroperoxide 80-15-9	positive	bacterial reverse mutation assay (e.g Ames test)	without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Cumene hydroperoxide 80-15-9	negative	dermal		mouse	
Ethane-1,2-diol 107-21-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Cumene hydroperoxide 80-15-9		inhalation: aerosol	6 h/d5 d/w	rat	

Section 12. Ecological information

General ecological information: Do not empty into drains / surface water / ground water.**Ecotoxicity:** Harmful to aquatic life with long lasting effects.**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Acrylic acid 79-10-7	LC50	27 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Acrylic acid 79-10-7	EC10	0.03 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC50	0.13 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC10	41 mg/l	Bacteria	16 h		
Cumene hydroperoxide 80-15-9	LC50	3.9 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Cumene hydroperoxide 80-15-9	EC50	18 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Cumene hydroperoxide 80-15-9	ErC50	3.1 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Cumene hydroperoxide 80-15-9	EC10	70 mg/l	Bacteria	30 min		
Ethane-1,2-diol 107-21-1	NOEC	15,380 mg/l	Fish	28 d	Oryzias latipes	OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
Ethane-1,2-diol 107-21-1	LC50	72,860 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethane-1,2-diol 107-21-1	EC50	34,400 mg/l	Daphnia	48 h	Ceriodaphnia sp.	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethane-1,2-diol 107-21-1	EC50	> 20,000 mg/l	Algae		Microcystis aeruginosa	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethane-1,2-diol 107-21-1	EC0	> 10,000 mg/l	Bacteria	16 h		

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
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Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Acrylic acid 79-10-7	inherently biodegradable	aerobic	100 %	OECD Guideline 302 B (Inherent biodegradability: Zahn-Wellens/EMPA Test)
Cumene hydroperoxide 80-15-9		no data	0 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Ethane-1,2-diol 107-21-1	readily biodegradable	aerobic	83 - 96 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Acrylic acid 79-10-7		3.16				
Acrylic acid 79-10-7	0.46				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Cumene hydroperoxide 80-15-9		9.1		calculation		OECD Guideline 305 (Bioconcentration: Flow- through Fish Test)
Cumene hydroperoxide 80-15-9	2.16					
Ethane-1,2-diol 107-21-1	-1.36					

Section 13. Disposal considerations

- Waste disposal of product:** Waste incineration or disposal with the approval of the responsible local authority.
- Disposal for uncleaned package:** Collection and delivery to recycling enterprise or other registered elimination institution.

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).

General information:

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

Section 15. Regulatory information**SUSMP Poisons Schedule**

None

AICS:

All components are listed or are exempt from listing on the Australian Inventory of Chemical Substances (AICS).

Section 16. Other information

Abbreviations/acronyms:

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

Reason for issue:

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

Date of previous issue:

24.06.2014

Disclaimer:

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