



Safety Data Sheet

Page 1 of 8

LOCTITE EA 3478 A known as Loctite(R) Fixmaster(R)Superior

SDS No. : 157166

V001.2

Date of issue: 04.09.2020

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

Product name: LOCTITE EA 3478 A known as Loctite(R) Fixmaster(R)Superior

Intended use: Epoxy resin

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:

<u>Hazard Class</u>	<u>Hazard Category</u>
Skin irritation	Category 2
Serious eye irritation	Category 2A
Skin sensitizer	Category 1
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. H411 Toxic 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. 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. 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 Take off contaminated clothing. P391 Collect spillage.
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: Part A of two part adhesive

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
reaction product: bisphenol-A-(epichlorhydrin)	25068-38-6	30- < 60 %
2,2'-(methylenebis(p-phenyleneoxymethylene))bisoxirane	2095-03-6	< 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 attention immediately.
Skin:	Immediately flush skin with plenty of water (using soap, if available). Seek medical advice.
Eyes:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention from a specialist.
Inhalation:	Move to fresh air. Keep warm and in a quiet place. If adverse health effects develop seek medical attention.
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: Carbon dioxide, foam, powder
Fine water spray

Improper extinguishing media: Water spray jet

Decomposition products in case of fire: Thermal decomposition can lead to release of irritating gases and vapors.
Carbon monoxide.
Carbon dioxide.
Oxides of nitrogen.

Special protective equipment for fire-fighters: Wear protective equipment.
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: Danger of slipping on spilled product.
Wear impervious gloves and chemical splash goggles.
Ensure adequate ventilation.
Avoid skin and eye contact.

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

Clean-up methods: Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container.
Dispose of contaminated material as waste according to Section 13.

Section 7. Handling and storage

Precautions for safe handling: Use only with adequate ventilation.
For the Part A plus Part B adhesive mixture, follow curing schedule as recommended in product literature.
Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full.
Avoid contact with eyes, skin and clothing.
Wear protective equipment.

Conditions for safe storage: Store in sealed original container.
Store in a cool, dry place.
Ensure that storage and workrooms are adequately ventilated.
Must be stored in a room with spill collection facilities.
Keep away from heat and direct sunlight.

Section 8. Exposure controls / personal protection

National exposure standards:

None

Engineering controls:	Ensure good ventilation/extraction.
Eye protection:	Tightly fitting safety goggles
Skin protection:	Use of protective coveralls and long sleeves is recommended. The use of chemical resistant gloves such as Nitrile is recommended. 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:	Gray pastegrey paste
Odor:	mildmild
Specific gravity:	1.14
Flash point:	204 °C (399.2 °F)
Vapor pressure: (no method; 50 °C (122 °F))	< 700 mbar
Density:	1.1400 g/cm3
Solubility in water:	Slight
Viscosity (dynamic): (; speed of rotation: 2.5 min-1; Spindle No: TF; Method: ;; LCT STM 10; Viscosity Brookfield)	1,200,000 - 2,100,000 cPas
VOC content: (2010/75/EC)	< 3.00 %

Section 10. Stability and reactivity

Stability:	Stable under normal conditions of temperature and pressure.
Conditions to avoid:	Keep away from open flames, hot surfaces and sources of ignition. Store away from incompatible materials. Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately.
Incompatible materials:	Strong oxidizing agents. Acids. Bases.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide. Carbon dioxide. Oxides of nitrogen.

Section 11. Toxicological information

Health Effects:**Ingestion:**

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin:

Irritating to skin.

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

May cause sensitization by skin contact.

Eyes:

Causes serious eye irritation.

Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Inhalation:

Vapors may cause headaches, nausea, dizziness and respiratory tract irritation.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	LD50 LD50	> 2,000 mg/kg > 2,000 mg/kg	oral dermal		rat rat	OECD Guideline 420 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)
2,2'-[methylenebis(p-phenyleneoxymethylene)] bisoxirane 2095-03-6	LD50 LD50	> 2,000 mg/kg > 2,000 mg/kg	oral dermal		rat rat	OECD Guideline 420 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	moderately irritating	24 h	rabbit	Draize Test

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-[methylenebis(p-phenyleneoxymethylene)] bisoxirane 2095-03-6	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 472 (Genetic Toxicology: Escherichia coli, Reverse Mutation Assay)
reaction product: bisphenol-A- (epichlorhydrin) 25068-38-6	negative	oral: gavage		mouse	not specified

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	NOAEL=50 mg/kg	oral: gavage	14 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Section 12. Ecological information**General ecological information:**

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

Ecotoxicity:

Toxic to aquatic life with long lasting effects.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	LC50	1.75 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	EC50	1.7 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	EC50	> 11 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	NOEC	4.2 mg/l	Algae	72 h	Scenedesmus capricornutum	OECD Guideline 201 (Alga, Growth Inhibition Test)
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	IC50	> 100 mg/l	Bacteria	3 h	activated sludge, industrial	other guideline:
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane 2095-03-6	LC50	> 1 - 10 mg/l	Fish	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane 2095-03-6	EC50	> 1 - 10 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	not readily biodegradable.	aerobic	5 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane 2095-03-6	not readily biodegradable.	aerobic	< 10 %	OECD 301 A - F

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
reaction product: bisphenol-A-(epichlorhydrin) 25068-38-6	3.242				25 °C	EU Method A.8 (Partition Coefficient)

Section 13. Disposal considerations

- Waste disposal of product:** Collection and delivery to recycling enterprise or other registered elimination institution.
- 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:

UN no.: 3082
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorhydrin resin)
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. (Bisphenol-A Epichlorhydrin resin)
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), 197 (IATA), 969 (IMDG) may be applied, which can result in a deviation from the transport classification for packed goods.

Section 15. Regulatory information

SUSMP Poisons Schedule

5

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
CAS: Chemical Abstracts Service
REACH: Registration, Evaluation, Authorization & Restriction of Chemicals
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

Reason for issue: Reviewed SDS. Reissued with new date. involved chapters: 2,3,9,16

Date of previous issue: 21.09.2015

Disclaimer:

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