

SAFETY DATA SHEET



Jotamastic 80 - Comp. A

1. Identification of the preparation and of the company

Product name and/or code : Jotamastic 80 - Comp. A
Label No. : 5580
Supplier/Manufacturer : Jotun (Singapore) Pte Ltd
 11 & 15 Sixth Lok Yang Road
 Singapore 628111
 Phone: 6508 8288
 Fax: 6265 7484
 SDSJotun@jotun.no

Emergency telephone number : Jotun (Singapore) Pte Ltd, Tel: 6508 8288

2. Hazards identification

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Flammable.

Irritating to eyes and skin. May cause sensitisation by skin contact.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



Irritant

Additional warning phrases : Contains epoxy constituents. See information supplied by the manufacturer. This information is provided by the present Safety Data Sheet.

The preparation may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect.

3. Composition/information on ingredients

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC.

Chemical name*	Notes	CAS number	EC number	% by weight	Classification
reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)	-	25068-38-6	500-033-5	10 - 25	Xi; R36/38 R43
xylene	C	1330-20-7	215-535-7	2.5 - 10	N; R51/53 R10 Xn; R20/21 Xi; R38
2-methylpropan-1-ol	6	78-83-1	201-148-0	2.5 - 10	R10 Xi; R41, R37/38 R67
benzyl alcohol	-	100-51-6	202-859-9	1 - 2.5	Xn; R20/22
epoxy resin (MW 700-1200)	-	25036-25-3		1 - 2.5	Xi; R36/38 R43
Ethylbenzene	-	100-41-4	202-849-4	1 - 2.5	F; R11 Xn; R20
See section 16 for the full text of the R-phrases declared above					

Occupational exposure limits, if available, are listed in section 8.

4. First-aid measures

First-aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do not use solvents or thinners.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting.

5. Fire-fighting measures

- Extinguishing media** : Recommended: alcohol-resistant foam, CO₂, powders, water spray.
- Extinguishing media not to be used** : Do not use water jet.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

6. Accidental release measures

- Personal precautions** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).
- Spill** : Preferably clean with a detergent. Avoid using solvents.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.
- In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.
- To dissipate static electricity during transfer, earth drum and connect to receiving container with bonding strap. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.
- Keep container tightly closed. Keep away from heat, sparks and flame. No sparking tools should be used.
- Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this preparation. Avoid inhalation of dust from sanding.
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
- Put on appropriate personal protective equipment (see section 8).
- Never use pressure to empty. Container is not a pressure vessel.
- Always keep in containers made from the same material as the original one.
- Comply with the health and safety at work laws.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

Storage : Store in accordance with local regulations. Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. Keep away from: oxidising agents, strong alkalis, strong acids. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not empty into drains.

8. Exposure controls/personal protection

Engineering measures : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Ingredient name

xylene

Occupational exposure limits

EU OEL (Europe, 5/2006). Absorbed through skin. Notes: Indicative

short term: 442 mg/m³ 15 minute(s).

short term: 100 ppm 15 minute(s).

8 hours: 221 mg/m³ 8 hour(s).

8 hours: 50 ppm 8 hour(s).

2-methylpropan-1-ol

ACGIH TLV (United States, 1/2008).

TWA: 152 mg/m³ 8 hour(s).

TWA: 50 ppm 8 hour(s).

Ethylbenzene

EU OEL (Europe, 4/2004). Absorbed through skin. Notes: Indicative

STEL: 884 mg/m³ 15 minute(s). Form: All forms

STEL: 200 ppm 15 minute(s). Form: All forms

TWA: 442 mg/m³ 8 hour(s). Form: All forms

TWA: 100 ppm 8 hour(s). Form: All forms

Personal protective equipment

Respiratory system

: If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use respiratory mask with charcoal and dust filter when spraying this product.(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

Skin and body

: Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres.

Hands

: For prolonged or repeated handling, use the following type of gloves: gloves: polyvinyl alcohol or nitrile.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Eyes

: Use safety eyewear designed to protect against splash of liquids.

9. Physical and chemical properties

Physical state

: Liquid.

Odour

: Characteristic.

Colour

: Various

Flash point

: Closed cup: 35°C (95°F)

Density

: 1.6 g/cm³

Explosion limits

: 1.1 - 13%

Solubility

: Insoluble in the following materials: cold water and hot water.

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7).

Hazardous decomposition products: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

11. Toxicological information

There is no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See sections 2 and 15 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the preparation and exposure to spray mist and vapour should be avoided.

Contains: reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight \leq 700), epoxy resin (MW 700-1200). May produce an allergic reaction.

12. Ecological information

There is no data available on the preparation itself.
Do not allow to enter drains or watercourses.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is classified for eco-toxicological properties accordingly. See Sections 2 and 15 for details.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight \leq 700)	-	Acute EC50 1,4 mg/l	Daphnia	48 hours
	-	Acute LC50 3,1 mg/l	Fish - fathead minnow	96 hours
xylene	Mortality	Acute LC50 8500 ug/L Marine water	Crustaceans - Daggerblade grass shrimp	48 hours
	Mortality	Acute LC50 3300 to 4093 ug/L Fresh water	Palaemonetes pugio Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss	96 hours
2-methylpropan-1-ol	Intoxication	Acute EC50 1439000 to 1933000 ug/L Fresh water	Daphnia - Water flea - Daphnia magna	6 to 48 hours
	Mortality	Acute LC50 1330000 to 1520000 ug/L Fresh water	Fish - Rainbow trout, donaldson trout - Oncorhynchus	96 hours

benzyl alcohol	Mortality	Acute LC50 460000 ug/L Fresh water	mykiss - 1,67 g Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 4 to 8 weeks - 1,1 to 3,1 cm	96 hours
	Mortality	Acute LC50 15000 ug/L Marine water	Fish - Inland silverside - Menidia beryllina - 40 to 100 mm	96 hours
	Mortality	Acute LC50 10000 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 33 to 75 mm	96 hours
Ethylbenzene	Population Intoxication	Acute EC50 7,2 mg/L	Algae	48 hours
	Intoxication	Acute EC50 2,97 mg/L	Daphnia	48 hours
	Intoxication	Acute EC50 2,93 mg/L	Daphnia	48 hours
	Mortality	Acute LC50 4,2 mg/L	Fish	96 hours
	Mortality	Acute LC50 9,09 mg/L	Fish	96 hours
	Mortality	Acute LC50 9,6 mg/L	Fish	96 hours

Ecological information

Biodegradability

Product/ingredient name

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)

Aquatic half-life

-

Photolysis

-

Biodegradability

Not readily

xylene

-

-

Readily

benzyl alcohol

-

-

Readily

Bioaccumulative potential

Product/ingredient name

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)

LogP_{ow}

>3

BCF

-

Potential

high

xylene

3,12

-

high

benzyl alcohol

1,1

<100

low

AOX : The product contains organically bound halogens and can contribute to the AOX value in waste water.

13. Disposal considerations

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

European waste catalogue (EWC) : 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances. If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

14. Transport information

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

International transport regulations

Proper shipping name : Paint

UN number : 1263

Class : 3

Jotamastic 80 - Comp. A

Packing group : III

Label :



Additional information

ADR / RID : Tunnel restriction code: (E)
Hazard identification number: 30
Special provisions: 640E
ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to receptacles < 450 litre capacity).

IMDG : Emergency schedules (EmS): F-E, S-E
Marine pollutant: No.
IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5 (applicable to receptacles < 30 litre capacity).

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

15. Regulatory information

EU regulations : The product is classified and labelled for supply in accordance with the Directive 1999/45/EC as follows:

Hazard symbol or symbols :



Irritant

Risk phrases : R10- Flammable.
R36/38- Irritating to eyes and skin.
R43- May cause sensitisation by skin contact.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases : S23- Do not breathe vapour / spray.
S24- Avoid contact with skin.
S37- Wear suitable gloves.
S51- Use only in well-ventilated areas.

Contains: : reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)
epoxy resin (MW 700-1200)

Additional warning phrases : Contains epoxy constituents. See information supplied by the manufacturer. This information is provided by the present Safety Data Sheet.

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

16. Other information

CEPE Classification : 1

Full text of R-phrases referred to in sections 2 and 3 - Europe : R11- Highly flammable.
R10- Flammable.
R20- Harmful by inhalation.
R20/21- Harmful by inhalation and in contact with skin.
R20/22- Harmful by inhalation and if swallowed.
R41- Risk of serious damage to eyes.
R38- Irritating to skin.
R36/38- Irritating to eyes and skin.
R37/38- Irritating to respiratory system and skin.
R43- May cause sensitisation by skin contact.
R67- Vapours may cause drowsiness and dizziness.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

The information in this Safety Data Sheet is required pursuant to EU Directive 91/155/EEC and its amendments.

Date of issue : 12.01.2009.

Version : 2

✔ Indicates information that has changed from previously issued version.

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.