

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier	
Product name	: Jotamastic 85 Comp B
Product code	: 52743
Product description	: Hardener. Paint.
Product type	: Liquid.
Other means of identification	: Not available.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use in coatings - Industrial use

1.3 Details of the supplier of the safety data sheet

Jotun A/S P.O.Box 2021 3202 Sandefjord Norway

Tel: + 47 33 45 70 00 Fax: +47 33 45 72 42 E-mail: SDSJotun@jotun.no

1.4 Emergency telephone number

Norwegian National Poison Centre: +47 22 59 13 00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: MixtureClassification according to Regulation (EC) No. 1272/2008 [CLP/GHS]Flam. Liq. 3, H226Skin Irrit. 2, H315Eye Dam. 1, H318STOT SE 3, H335Aquatic Chronic 3, H412The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements Hazard pictograms



Signal word

: Danger.

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SECTION 2: Hazards	id	entification
Hazard statements	:	 H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H318 - Causes serious eye damage. H335 - May cause respiratory irritation. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements		
General	:	Not applicable.
Prevention	:	 P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment. P261 - Avoid breathing vapour.
Response	:	 P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	1	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	1	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	xylene butan-1-ol
Supplemental label elements	1	EUH208 - Contains ethylenediamine. May produce an allergic reaction.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	en	<u>ts</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	1	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

SECTION 3: Composition/information on ingredients					
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 20 mg/ I	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≤10	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 500 mg/kg	[1] [2]
ethylenediamine	REACH #: 01-2119480383-37 EC: 203-468-6 CAS: 107-15-3	<1	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1B, H334 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	ATE [Oral] = 500 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1] [2] [3]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of 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.
Eye contact	: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Date of issue/Date of revision	: 20.12.2023 Date of previous issue : No previous validation Version : 1 3/17

SECTION 4: First aid measures

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.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture 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.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains ethylenediamine. May produce an allergic reaction.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large
	quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

See toxicological information (Section 11)

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SECTION 5: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	:	Recommended: alcohol-resistant foam, CO ₂ , powders, water spray.
Unsuitable extinguishing media	:	Do not use water jet.
5.2 Special hazards arising f	rom	the substance or mixture
Hazards from the substance or mixture	-	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous combustion products	-	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
5.3 Advice for firefighters		
Special protective actions for fire-fighters	-	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective equipment for fire-fighters	:	Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	:	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
6.3 Methods and material for containment and cleaning up	:	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). Preferably clean with a detergent. Avoid using solvents.
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

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.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

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 mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

SECTION 7: Handling and storage

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.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

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. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds

Danger criteria

С		Notification and MAPP threshold	Safety report threshold
Ρ	5c	5000 tonne	50000 tonne

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s)

- Recommendations **Industrial sector specific** solutions
- : Not available.
- : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	FOR-2011-12-06-1358 (Norway, 12/2022). [xylen] Absorbed
	through skin. Notes: H E
	TWA: 108 mg/m ³ 8 hours.
	TWA: 25 ppm 8 hours.
ethylbenzene	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through
	skin. Notes: H K E
	TWA: 5 ppm 8 hours.
	TWA: 20 mg/m ³ 8 hours.
butan-1-ol	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through
	skin. Notes: H T
	CEIL: 75 mg/m ³
	CEIL: 25 ppm
ethylenediamine	FOR-2011-12-06-1358 (Norway, 12/2022). Skin sensitiser.
	Notes: A
	TWA: 25 mg/m ³ 8 hours.
Date of issue/Date of revision : 20.12.202	3 Date of previous issue : No previous validation Version : 1 6/1

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SECTION 8: Exposure controls/personal protection

	TWA: 10 ppm 8 hours.
Recommended monitoring procedures	: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

				Effects
DNEL	Long term Oral	5 mg/kg	General	Systemic
DNEL		65.3 mg/m ³		Local
DNEL		65.3 mg/m ³		Systemic
DNEL	Long term Dermal			Systemic
		bw/day	population	
DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
DNEL	Long term Inhalation	221 mg/m ³	Workers	Local
DNEL	Long term	221 mg/m ³	Workers	Systemic
DNEL		260 ma/m ³	General	Local
DNEL		260 ma/m ³		Systemic
0.122		200 mg/m		eyetenne
DNFI		442 ma/m ³		Local
DILL		112 mg/m	W ON OF O	Loodi
DNEI		442 mg/m^3	Workers	Systemic
DIVLL		442 mg/m	Workers	Cysternio
DMEL	Long term	442 mg/m³	Workers	Local
DMEL	Short term	884 mg/m³	Workers	Systemic
		1.6 ma/ka	General	Systemic
DINCL	Long term Oral			Oystenno
	Long term			Systemic
DINLL		15 mg/m		Systemic
		$77 m a / m^3$		Svetomie
DINEL		// mg/m	VVOIKEIS	Systemic
DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
	Short torre		Morkors	
DINEL		293 mg/m°	VVUIKEIS	Local
		1 5625 mal	Coporal	Systemia
DINEL	Long term Oral			Systemic
	Long torm Dormal			Sustamia
DINEL	Long term Dermal			Systemic
	Long to me			Quetant
DNEL				Systemic
DNEL		155 mg/m³		Local
D ,				l
DNEL	Long term Inhalation	310 mg/m ³	vvorkers	Local
DNEL		0.11 ma/	General	Systemic
		kg bw/day	population	
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	DNELLong term Inhalation DNELDNELLong term Inhalation DNELDNELLong term DermalDNELLong term DermalDNELLong term Inhalation DNELDNELLong term InhalationDNELLong term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term OralDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term InhalationDNELLong term 	DNELLong term 	DNELLong term Inhalationbw/day 65.3 mg/m³population General populationDNELLong term Inhalation65.3 mg/m³General populationDNELLong term Dermal125 mg/kg bw/dayGeneral populationDNELLong term Dermal212 mg/kg bw/dayWorkersDNELLong term Inhalation221 mg/m³WorkersDNELLong term Inhalation221 mg/m³WorkersDNELShort term Inhalation260 mg/m³General populationDNELShort term Inhalation260 mg/m³General populationDNELShort term Inhalation260 mg/m³General populationDNELShort term Inhalation442 mg/m³WorkersDNELShort term Inhalation442 mg/m³WorkersDMELShort term Inhalation1.6 mg/kg bw/dayGeneral populationDMELLong term Inhalation1.6 mg/kg bw/dayGeneral populationDNELLong term Inhalation1.6 mg/kg bw/dayWorkersDNELLong term Inhalation180 mg/kg bw/dayWorkersDNELLong term Dermal180 mg/kg bw/dayWorkersDNELLong term Oral1.5625 mg/ kg bw/dayGeneral populationDNELLong term Dermal155 mg/m³ general populationGeneral populationDNELLong term Dermal155 mg/m³ general populationGeneral populationDNELLong term Dermal155 mg

SECTION 8: Exposure controls/personal protection					
	DNEL	Long term Inhalation	6.25 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	25 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
-	Marine	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	Sewage Treatment Plant	9.6 mg/l	-
	Fresh water sediment	13.7 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-
butan-1-ol	Fresh water	0.082 mg/l	-
	Marine	0.0082 mg/l	-
	Sewage Treatment Plant	2476 mg/l	-
	Fresh water sediment	0.178 mg/kg dwt	-
	Marine water sediment	0.0178 mg/kg dwt	-
	Soil	0.015 mg/kg dwt	-

8.2 Exposure controls

0.2 Exposure controls	
Appropriate engineering controls	: 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.
Individual protection meas	<u>ures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Skin protection	

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

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

SECTION 8: Exposure controls/personal protection

Gloves

Wear suitable gloves tested to ISO 374-1:2016.

May be used, gloves(breakthrough time) 4 - 8 hours: Viton® (> 0.7 mm), neoprene (> 0.35 mm) Not recommended, gloves(breakthrough time) < 1 hour: butyl rubber (> 0.4 mm), PVC (> 0.5 mm) Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.75 mm), 4H/Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), polyvinyl alcohol (PVA) (> 0.3 mm)

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.

Body protection	 Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (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.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Clear.
Odour	: Characteristic.
Odour threshold	: Not applicable.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 132.82°C (271.1°F)
Flammability	: Not applicable.
Lower and upper explosion limit	: 0.8 - 11.3%
Flash point	: Closed cup: 27°C
Auto-ignition temperature	: Lowest known value: 355°C (671°F) (butan-1-ol).
Decomposition temperature	: Not available.
рН	: Not applicable.
Viscosity	: Kinematic (40°C): >20.5 mm²/s
Solubility in water	: cold water Not soluble hot water Not soluble
Partition coefficient: n-octanol/ water	: Not available.
Vapour pressure	: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.96 kPa (7.2 mm Hg) (at 20°C)
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.72compared with butyl acetate
Density	: 0.961 g/cm ³
Date of issue/Date of revision	20.12.2023 Date of previous issue : No previous validation Version : 1 9/1

SECTION 9: Physical and chemical properties

Vapour density	: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.49 (Air = 1)
Explosive properties	: Not available.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.
10.5 Incompatible materials	 Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
hazardous reactions 10.4 Conditions to avoid 10.5 Incompatible materials 10.6 Hazardous	 When exposed to high temperatures may produce hazardous decomposition products. Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. Decomposition products may include the following materials: carbon monoxide,

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture 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.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains ethylenediamine. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours	
5	LD50 Oral	Rat	4300 mg/kg	-	
	TDLo Dermal	Rabbit	4300 mg/kg	-	
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours	
-	LD50 Dermal	Rabbit	>5000 mg/kg	-	
	LD50 Oral	Rat	3500 mg/kg	-	
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-	
ethylenediamine	LC50 Inhalation Vapour	Rat	7 mg/l	4 hours	
-	LD50 Dermal	Rabbit	730 uL/kg	-	
	LD50 Oral	Rat	1200 mg/kg	-	

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Jotamastic 85 Comp B	7246.4	4478.6	N/A	67.6	N/A
xylene	4300	1100	N/A	20	N/A
ethylbenzene	3500	N/A	N/A	17.8	N/A
butan-1-ol	500	N/A	N/A	N/A	N/A
ethylenediamine	500	300	N/A	11	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
ethylenediamine	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Eyes - Severe irritant	Rabbit	-	750 ug	-
	Skin - Moderate irritant	Rabbit	-	450 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 10	-
				mg	

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
ethylenediamine		Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects

Fertility effects

- : No known significant effects or critical hazards.
- : No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
butan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

SECTION 11: Toxicological information

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

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

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
-	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
ethylenediamine	Acute EC50 100000 µg/l Fresh water	Algae - Chlorella pyrenoidosa	96 hours
-	Acute LC50 115.7 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 160 µg/l Fresh water	Daphnia - Daphnia magna	21 days
0	. This washenial is becauseful to a succetion	i If a second state of the second of the second state of the secon	•

Conclusion/Summary

: This material is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene	-		Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
butan-1-ol	1	-	low
ethylenediamine	-7.02	-	low

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: Yes.
Disposal considerations	 Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Disposal considerations	 Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
Type of packaging	European waste catalogue (EWC)
CEPE Guidelines	15 01 10* packaging containing residues of or contaminated by hazardous substances
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Jotamastic 85 Comp B					
SECTION 14:	Transp	ort inf	ormation		
	A	DR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263		UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint		Paint	Paint	Paint
14.3 Transport hazard class(es)	3	•	3	3	3
14.4 Packing group	111		111	111	111
14.5 Environmental hazards	No.		Yes.	No.	No.
Additional informa ADR/RID	<u>ation</u>	Tunn ADR/	<mark>rd identification numbe</mark> <u>el code</u> (D/E) RID: Viscous substance. tacles < 450 litre capacit	Not goods of class 3, ref	. 2.2.3.1.5 (only applicable to
ADN		 The product is only regulated as an environmentally hazardous substance when transported in tank vessels. 			zardous substance when
IMDG			gency schedules F-E, S	<u>S-E</u>	
		IMDG: Viscous substance. Transport in accordance with 2.3.2.5 of the IMDG Coc (only applicable to receptacles < 450 litre capacity).			h 2.3.2.5 of the IMDG Code
UN			/iscous substance. Not g tacles < 450 litre capacit	oods of class 3, ref. 2.3.2 y).	.5 (only applicable to
14.6 Special precau user	utions for	uprig		at persons transporting th	n closed containers that are e product know what to do i
14.7 Maritime trans	port in : Not available.				

bulk according to IMO

instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name		Reference number	Date of revision
Substance of equivalent concern for human health	ethylenediamine	Recommended	D(2021) 4569-DC	12.04.2023

SECTION 15: Regula	tory information
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Other EU regulations	
VOC VOC for Ready-for-Use	 The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information. Not available.
Mixture	
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
Ozone depleting substance Not listed.	<u>es (1005/2009/EU)</u>
Prior Informed Consent (P Not listed.	<u>PIC) (649/2012/EU)</u>
Persistent Organic Polluta Not listed.	<u>ints</u>
This product may add to the major accident hazards. <u>National regulations</u> Industrial use	 calculation for determining whether a site is within the scope of the Seveso Directive on 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.
<u>Norway</u>	
Product registration number	: Under declaration
International regulations Chemical Weapon Convent Not listed.	ion List Schedules I, II & III Chemicals
Montreal Protocol Not listed.	
Stockholm Convention on I Not listed.	Persistent Organic Pollutants
Rotterdam Convention on F Not listed.	Prior Informed Consent (PIC)
UNECE Aarhus Protocol on Not listed.	POPs and Heavy Metals
15.2 Chemical safety assessment	: Not applicable.
Date of issue/Date of revision	: 20.12.2023 Date of previous issue : No previous validation Version : 1 15/17

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
-	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Date of issue/Date of revision	า	: 20.12.2023	Date of previous issue	: No previous validation	Version	:1	16/17
Date of previous issue	:	No previous	validation				
Date of issue/ Date of revision	:	20.12.2023					
Date of printing	:	20.12.2023					
Acute Tox. 4 Aquatic Chronic 3 Asp. Tox. 1 Eye Dam. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Resp. Sens. 1B Skin Corr. 1B Skin Irrit. 2 Skin Sens. 1B STOT RE 2	ACUTE T LONG-TE ASPIRAT SERIOUS SERIOUS FLAMMA FLAMMA RESPIRA SKIN CO SKIN CO SKIN SEI SPECIFIO	TION HAZARE S EYE DAMAG S EYE DAMAG BLE LIQUIDS BLE LIQUIDS ATORY SENS RROSION/IR RROSION/IR NSITISATION C TARGET O	ategory 4 IIC) AQUATIC HAZAI O - Category 1 GE/EYE IRRITATION GE/EYE IRRITATION S - Category 2 S - Category 3 ITISATION - Category RITATION - Category RITATION - Category I - Category 1B RGAN TOXICITY - R	- Category 1 - Category 2 y 1B / 1B			

SECTION 16: Other information

Version

: 1

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.