SAFETY DATA SHEET



Jotamastic 90 Alu B15 Comp A

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

1.1 Product identifier

Product name : Jotamastic 90 Alu B15 Comp A

Product code : 20683

Product description : Paint.

Product type : Liquid.

Other means of : Not available.

identification

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

Use in coatings - Industrial use
Use in coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Jotun Paints (Europe) Ltd.

Stather Road

P.O.Box 2021
Flixborough, Scunthorpe

3202 Sandefjord

North Lincolnshire Norway

DN15 8RR

England Tel: +47 33 45 70 00 Fax: +47 33 45 72 42

Tel: +44 17 24 40 00 00

Fax: +44 17 24 40 01 00 SDSJotun@jotun.no

1.4 Emergency telephone number

Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

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

2.2 Label elements

Hazard pictograms







Signal word : Warning.

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SECTION 2: Hazards identification

Hazard statements : H226 - Flammable liquid and vapour.

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 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 : P391 - Collect spillage.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Hazardous ingredients : epoxy resin (MW ≤ 700)

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers

hydrocarbons, c9-unsatd., polymd.

2-methylpropan-1-ol

glycidyl ether of 3-alkyl phenol Phenol, methylstyrenated Phenol, styrenated

Supplemental label

elements

Contains epoxy constituents. 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 requirements

Containers to be fitted

with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : 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 : None known. not result in classification

not result in diagoniation

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	Weight %	Regulation (EC) No. 1272/2008 [CLP]	Type
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	Index: 603-073-00-2 EC: 500-180-5 CAS: 67989-52-0	≤10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤10	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	[1] [2]
hydrocarbons, c9-unsatd., polymd.	REACH #: 01-2119555292-40 EC: 701-299-7 CAS: 71302-83-5	≤5	Aquatic Chronic 3, H412 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
2-methylpropan-1-ol	REACH #: 01-2119484609-23 EC: 201-148-0 CAS: 78-83-1 Index: 603-108-00-1	≤2.9	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
glycidyl ether of 3-alkyl phenol	REACH #: 01-2119982994-15 EC: 500-210-7 CAS: 68413-24-1	≤3	Skin Sens. 1, H317	[1]
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6	≤3	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
hydrocarbons, C9, aromatics	REACH #: 01-2119455851-35 EC: 265-199-0 CAS: 64742-95-6	≤2.9	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
Phenol, methylstyrenated	REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1	≤3	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
Phenol, styrenated	REACH #: 02-2119629611-43 EC: 262-975-0 CAS: 61788-44-1	≤3	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
			See Section 16 for the full text of the H statements declared above.	

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SECTION 3: Composition/information on ingredients

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.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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: Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate 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.

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. 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. 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. Ingestion may cause nausea, diarrhea and vomiting.

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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.

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SECTION 4: First aid measures

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO2, powders, water spray.

Unsuitable extinguishing media

: Do not use water jet.

5.2 Special hazards arising from 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

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SECTION 7: Handling and storage

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.

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.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

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	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 441 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
2-methylpropan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 231 mg/m³ 15 minutes. STEL: 75 ppm 15 minutes. TWA: 154 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m³ 15 minutes.

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SECTION 8: Exposure controls/personal protection

STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m³ 8 hours.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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

Product/ingredient name	Exposure	Value	Population	Effects
epoxy resin (MW ≤ 700)	Short term Dermal	8.33 mg/ kg bw/day	Workers	Systemic
	Short term Inhalation	12.25 mg/ m³	Workers	Systemic
	Long term Dermal	8.33 mg/ kg bw/day	Workers	Systemic
	Long term Inhalation	12.25 mg/ m³	Workers	Systemic
	Short term Dermal	3.571 mg/ kg bw/day	General population [Consumers]	Systemic
	Short term Oral	0.75 mg/ kg bw/day	General population [Consumers]	Systemic
	Long term Dermal	3.571 mg/ kg bw/day	General population [Consumers]	Systemic
	Long term Oral	0.75 mg/ kg bw/day	General population [Consumers]	Systemic
4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsatd., dimers	Short term Dermal	3.3 mg/kg bw/day	General population	Systemic
Tany asias, and ansaran, annote	Long term Dermal	3.3 mg/kg bw/day	General population	Systemic
	Short term Dermal	5.6 mg/kg bw/day	Workers	Systemic
	Long term Dermal	5.6 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	23.5 mg/m ³	population	Local
	Long term Inhalation	23.5 mg/m ³	General population	Systemic
	Short term Inhalation	39.2 mg/m³		Local
	Long term Inhalation	39.2 mg/m³		Local
	Short term Inhalation	39.2 mg/m³		Systemic
	Long term Inhalation	39.2 mg/m³	Workers	Systemic
te of issue/Date of revision : 14 12 2021	Short term Dermal	0.00476 : 16 07 2	General	Local

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SECTION 8: Exposure controls/personal protection

	<u> </u>			
		mg/cm²	population	
	Long term Dermal	0.00476	General	Local
		mg/cm²	population	
	Short term Dermal	0.0079 mg/	Workers	Local
		cm ²		
	Long term Dermal	0.0079 mg/	Workers	Local
		cm²		
xylene	Long term Oral	1.6 mg/kg	General	Systemic
		bw/day	population	
	Long term	14.8 mg/m ³		Systemic
	Inhalation	77 / 3	population	0
	Long term Inhalation	77 mg/m³	Workers	Systemic
	Long term Dermal	108 mg/kg	General	Systemic
	Long term Dermai	bw/day	population	Oysternic
	Long term Dermal	180 mg/kg	Workers	Systemic
	Long tomi Bonnai	bw/day	WOIKOIS	Cystonno
	Short term	289 mg/m ³	Workers	Local
	Inhalation			2000
	Short term	289 mg/m ³	Workers	Systemic
	Inhalation			
hydrocarbons, c9-unsatd., polymd.	Long term Dermal	16.4 mg/	Workers	Systemic
		kg bw/day		-
	Long term	57 mg/m³	Workers	Systemic
	Inhalation			
	Long term Dermal	8 mg/kg	General	Systemic
		bw/day	population	
		00 / 2	[Consumers]	
	Long term	28 mg/m³	General	Systemic
	Inhalation		population	
	Lang tarm Oral	1 m a/ka	[Consumers]	Cyrotomia
	Long term Oral	4 mg/kg bw/day	General	Systemic
		bw/day	population [Consumers]	
	Long term Oral	0.33 mg/	General	Systemic
	Long term Oral	kg bw/day	population	Systemic
	Long term Dermal	1.67 mg/	General	Systemic
	Long tomi Bonnai	kg bw/day	population	Cystonno
	Long term Dermal	4.7 mg/kg	Workers	Systemic
		bw/day		-,
	Long term	0.58 mg/m ³	General	Systemic
	Inhalation		population	
	Long term	3.3 mg/m ³	Workers	Systemic
	Inhalation	_		
2-methylpropan-1-ol	Long term	310 mg/m ³	Workers	Local
	Inhalation			
	Long term Oral	25 mg/kg	General	Systemic
		bw/day	population	
		,	[Consumers]	
	Long term	55 mg/m³	General	Local
	Inhalation		population	
	l ong torm	55 ma/==3	[Consumers]	Local
	Long term Inhalation	55 mg/m³	General	Local
		210 mg/m ³	population Workers	Local
	Long term Inhalation	310 mg/m ³	AAOIVOIS	Local
glycidyl ether of 3-alkyl phenol	Long term Dermal	1.25 mg/	Workers	Systemic
grysian cure of 5-aikyi pricitor	Long term Dermal	kg bw/day	VVOINGIS	Cysterino
	Long term	2.204 mg/	Workers	Systemic
	Inhalation	m ³		7,5155
benzyl alcohol	Long term Oral	4 mg/kg	General	Systemic
,	3	bw/day	population	'
	Long term Dermal	4 mg/kg	General	Systemic
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		bw/day	population	
	Long term	5.4 mg/m ³	General	Systemic
	Inhalation		population	
	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	Short term Oral	20 mg/kg bw/day	General population	Systemic
	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	Long term	22 mg/m ³	Workers	Systemic
	Inhalation Short term	27 mg/m³	General	Systemic
	Inhalation Short term Dermal	40 mg/kg	population Workers	Systemic
	Short term Inhalation	bw/day 110 mg/m³	Workers	Systemic
ethylbenzene	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	Long term Inhalation	15 mg/m ³	General population	Systemic
	Long term Inhalation	77 mg/m³	Workers	Systemic
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Short term Inhalation	293 mg/m ³	Workers	Local
	Long term Inhalation	442 mg/m ³	Workers	Local
	Short term Inhalation	884 mg/m³	Workers	Systemic
hydrocarbons, C9, aromatics	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	150 mg/m ³	Workers	Systemic
	Long term Dermal	11 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	32 mg/m³	General population [Consumers]	Systemic
	Long term Oral	11 mg/kg bw/day	General population [Consumers]	Systemic
Phenol, methylstyrenated	Long term Dermal	16.4 mg/ kg bw/day	Workers	Systemic
	Long term Inhalation	57 mg/m³	General population [Consumers]	Systemic
	Long term Dermal	8 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	28 mg/m³	General population [Consumers]	Systemic
	Long term Oral	4 mg/kg bw/day	General population [Consumers]	Systemic
Phenol, styrenated	Long term Oral	0.29 mg/ kg bw/day	General population	Systemic
	Long term Inhalation	1.01 mg/m³		Systemic
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Long term Derma	al 1.46 mg/	General	Systemic
	kg bw/day	population	
Long term Derma	al 2.92 mg/	Workers	Systemic
	kg bw/day		
Long term	4.11 mg/m ³	Workers	Systemic
Inhalation			

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
epoxy resin (MW ≤ 700)	Fresh water	0.006 mg/l	-
	Marine	0.0006 mg/l	-
	Sewage Treatment	10 mg/l	-
	Plant		
	Fresh water sediment	0.996 mg/l	-
	Marine water sediment	0.0996 mg/l	_
	Soil	0.196 mg/l	-
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	_
	Sewage Treatment	6.58 mg/l	_
	Plant		
	Fresh water sediment	12.46 mg/kg dwt	_
	Marine water sediment	12.46 mg/kg dwt	_
	Soil	2.31 mg/kg dwt	_
hydrocarbons, c9-unsatd., polymd.	Fresh water	54 μg/l	
nydroddibons, do-dnadd, polymd.	Marine	5.4 μg/l	
	Sewage Treatment	2.2 mg/l	
	Plant	2.2 1119/1	_
	Fresh water sediment	1584 mg/kg dwt	
	Marine water sediment	158 mg/kg dwt	
	Marine water sediment	158 mg/kg dwt	_
	Soil	316.7 mg/kg dwt	_
			_
O manthada wa ma ma a la	Secondary Poisoning	200 mg/kg	-
2-methylpropan-1-ol	Fresh water	0.4 mg/l	-
	Marine	0.04 mg/l	-
	Sewage Treatment	10 mg/l	-
	Plant		
	Fresh water sediment	1.52 mg/kg dwt	-
	Marine water sediment	0.152 mg/kg dwt	-
	Soil	0.0699 mg/kg dwt	-
benzyl alcohol	Fresh water	1 mg/l	-
	Marine	0.1 mg/l	-
	Sewage Treatment Plant	39 mg/l	-
	Fresh water sediment	5.27 mg/kg dwt	_
	Marine water sediment	0.527 mg/kg dwt	-
	Soil	0.456 mg/kg dwt	_
ethylbenzene	Fresh water	0.1 mg/l	_
	Marine	0.01 mg/l	_
	Sewage Treatment	9.6 mg/l	_
	Plant	0.0g/.	
	Fresh water sediment	13.7 mg/kg dwt	_
	Soil	2.68 mg/kg dwt	_
	Secondary Poisoning	20 mg/kg	_
Phenol, methylstyrenated	Fresh water	14 µg/l	_
i nonoi, monyiotyronatou	Marine	1.4 µg/l	_
	Sewage Treatment	2.4 mg/l	
	Plant	2. 4 1119/1	-
	Fresh water sediment	52.9 mg/kg dwt	_
	Marine water sediment	5.3 mg/kg dwt	
	Soil	10.5 mg/kg dwt	
	Jon	10.5 mg/kg dwt	_

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8.2 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 measures

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. Contaminated work clothing should not be allowed out of the workplace. 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 EN 166 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.

Skin protection Gloves

: 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.

Wear suitable gloves tested to EN374.

Recommended, gloves(breakthrough time) > 8 hours: Responder, Viton®, 4H, Teflon

Not recommended, gloves(breakthrough time) < 1 hour: PVC

May be used, gloves(breakthrough time) 4 - 8 hours: nitrile rubber, neoprene, butyl rubber, polyvinyl alcohol (PVA)

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.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour Aluminium Odour Characteristic. **Odour threshold** : Not applicable. pН : Not applicable. Melting point/freezing point : Not applicable.

Initial boiling point and

boiling range

: Lowest known value: 108°C (226.4°F) (2-methylpropan-1-ol). Weighted average:

224.22°C (435.6°F)

Flash point : Closed cup: 28.5°C Highest known value: 0.84 (ethylbenzene) Weighted average: 0.61compared **Evaporation rate**

with butyl acetate

Flammability (solid, gas) Upper/lower flammability or

explosive limits

: Not applicable. : 0.8 - 13%

: Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Vapour pressure

Weighted average: 0.38 kPa (2.85 mm Hg) (at 20°C)

: Highest known value: 11.7 (Air = 1) (epoxy resin (MW ≤ 700)). Weighted Vapour density

average: 7.63 (Air = 1)

1.496 g/cm³ **Density**

: Insoluble in the following materials: cold water and hot water. Solubility(ies)

Partition coefficient: n-octanol/ : Not available.

water

: Lowest known value: >375°C (>707°F) (hydrocarbons, c9-unsatd., polymd.). **Auto-ignition temperature**

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C): >0.205 cm²/s (>20.5 cSt)

: Not available. **Explosive properties** : Not available. Oxidising properties

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity 10.2 Chemical stability

10.3 Possibility of hazardous reactions : No specific test data related to reactivity available for this product or its ingredients.

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

: 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 may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. decomposition products

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

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. 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. Ingestion may cause nausea, diarrhea and vomiting.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	20 g/kg	-
	LD50 Oral	Mouse	15600 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
hydrocarbons, c9-unsatd.,	LD50 Dermal	Rat	>2000 mg/kg	-
polymd.				
	LD50 Oral	Rat	>2000 mg/kg	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	19200 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-
benzyl alcohol	LD50 Oral	Rat	1230 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	-
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
-	LD50 Oral	Rat	2500 mg/kg	-

Acute toxicity estimates

Route	ATE value
	49204.92 mg/kg 17715.14 mg/kg 155.31 mg/l

Irritation/Corrosion

Product/ingredient name	Exposure	Species	Score	Exposure	Observation
epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
,	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
2-methylpropan-1-ol	Eyes - Irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-
benzyl alcohol	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
Phenol, methylstyrenated	Skin - Mild irritant	Mammal - species unspecified	-	-	-
Phenol, styrenated	Eyes - Mild irritant	Rabbit	-	0.1 Mililiters	-
-	Skin - Mild irritant	Rabbit	-	0.5 Mililiters	-
	Skin - Mild irritant	Mammal -	-	-	-

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SECTION 11: Toxicological information

	specie	es		
	unspec	cified		

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising
hydrocarbons, c9-unsatd., polymd.	skin	Mouse	Sensitising
glycidyl ether of 3-alkyl phenol	skin	Mammal - species unspecified	Sensitising
Phenol, methylstyrenated	skin	Mammal - species unspecified	Sensitising
Phenol, styrenated	skin	Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects: No known significant effects or critical hazards.Fertility effects: 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
2-methylpropan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
hydrocarbons, C9, aromatics	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
hydrocarbons, C9, aromatics	ASPIRATION HAZARD - Category 1

Other information : None identified.

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.

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SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
epoxy resin (MW ≤ 700)	Acute EC50 1.4 mg/l	Daphnia	48 hours
	Acute LC50 3.1 mg/l	Fish - pimephales promelas	96 hours
	Chronic NOEC 0.3 mg/l	Fish	21 days
xylene	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
2-methylpropan-1-ol	Chronic NOEC 4000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
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
hydrocarbons, C9, aromatics		Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
Phenol, styrenated	Acute EC50 100 mg/l	Algae	72 hours
	Acute EC50 54 mg/l	Daphnia	48 hours
	Acute LC50 25.8 mg/l	Fish	96 hours

This material is toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
epoxy resin (MW ≤ 700)	-	-	Not readily
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
ethylbenzene	-	-	Readily
hydrocarbons, C9, aromatics	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
epoxy resin (MW ≤ 700)	2.64 to 3.78	31	low
xylene	3.12	8.1 to 25.9	low
hydrocarbons, c9-unsatd., polymd.	3.627	-	low
2-methylpropan-1-ol	1	-	low
benzyl alcohol	0.87	<100	low
ethylbenzene	3.6	-	low
hydrocarbons, C9, aromatics	-	10 to 2500	high
Phenol, methylstyrenated	3.627	-	low

12.4 Mobility in soil

Soil/water partition

: Not available.

coefficient (Koc)

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 Other adverse effects : No known significant effects or critical hazards.

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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.

Result		European waste catalogue (EWC)
CEPE Paint 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

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint. Marine pollutant (epoxy resin (MW ≤ 700), 4,4'- Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids,	Paint

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SECTION 14: Transport information

			C18-unsatd., dimers)	
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID : The environmentally hazardous substance mark is not required when transported in

sizes of ≤5 L or ≤5 kg.

Hazard identification number 30

Tunnel code (D/E)

ADN : The environmentally hazardous substance mark is not required when transported in

sizes of ≤5 L or ≤5 kg.

IMDG The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, S-E

IATA The environmentally hazardous substance mark may appear if required by other

transportation regulations.

user

14.6 Special precautions for : 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.

14.7 Transport in bulk according to IMO instruments

: Not applicable.

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

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

: Not applicable.

Other EU regulations

mixtures and articles

VOC : 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.

VOC for Ready-for-Use

Mixture

: Not available.

: At least one component is not listed. **Europe inventory**

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SECTION 15: Regulatory information

Industrial emissions : Listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Listed

(integrated pollution prevention and control) -

Water

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

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.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety : Not applicable.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/20081

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

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

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SECTION 16: Other information

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	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.
H312	Harmful in contact with skin.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4 Aquatic Chronic 2	ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED
	EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE -
	Category 3

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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.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

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