## SAFETY DATA SHEET



## **Jotafloor Topcoat Comp A**

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

#### 1.1 Product identifier

Product name : Jotafloor Topcoat Comp A

Product code : 502
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 Flixborough, Scunthorpe North Lincolnshire DN15 8RR England

Tel: +44 17 24 40 00 00 Fax: +44 17 24 40 01 00 SDSJotun@jotun.com

#### 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 Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 STOT SE 3, H336 Aquatic Chronic 3, H412

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 : Danger.

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#### **SECTION 2: Hazards identification**

**Hazard statements** : H226 - Flammable liquid and vapour.

H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness.

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.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P261 - Avoid breathing vapour.

Response : P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

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 physician.

: P403 - Store in a well-ventilated place.

P235 - Keep cool.

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

national and international regulations.

**Hazardous ingredients**: epoxy resin (MW 700-1200)

xylene butan-1-ol

hydrocarbons, C9, aromatic 1-methoxy-2-propanol epoxy resin (MW ≤ 700)

fatty acids, C14-18 and C16-18-unsatd., maleated

Supplemental label

elements

**Storage** 

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

: Not applicable.

fastenings

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

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

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## **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 700-1200)	CAS: 25036-25-3	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	[1]
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	[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	[1] [2]
hydrocarbons, C9, aromatic	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≤10	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤5	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤5	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≤5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
fatty acids, C14-18 and C16-18-unsatd., maleated	REACH #: 01-2119976378-19	≤0.3	Skin Irrit. 2, H315 Skin Sens. 1, H317 See Section 16 for the full text of the H statements declared above.	[1]

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.

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#### **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.

**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. 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 watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**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<sub>2</sub>, 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

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.

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## **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.

#### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

## **SECTION 8: Exposure controls/personal protection**

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin.
	STEL: 441 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes. TWA: 220 mg/m³ 8 hours.
	TWA: 220 fig/fit o flours.
butan-1-ol	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin.
	STEL: 154 mg/m³ 15 minutes.
1-methoxy-2-propanol	STEL: 50 ppm 15 minutes.  EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
I metroxy 2 proparior	through skin.
	STEL: 560 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed
	through skin. STEL: 552 mg/m³ 15 minutes.
	STEL: 332 mg/m 13 minutes.
	TWA: 100 ppm 8 hours.
	TWA: 441 mg/m³ 8 hours.

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## **SECTION 8: Exposure controls/personal protection**

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
xylene	Short term Inhalation	289 mg/m³	Workers	Systemic
	Short term Inhalation	289 mg/m³	Workers	Local
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	77 mg/m³	Workers	Systemic
	Long term Dermal	108 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	14.8 mg/m³		Systemic
	Long term Oral	1.6 mg/kg bw/day	General population [Consumers]	Systemic
butan-1-ol	Long term Inhalation	310 mg/m³	Workers	Local
	Long term Oral	3.125 mg/ kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	55 mg/m³	General population [Consumers]	Local
hydrocarbons, C9, aromatic	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	150 mg/m³	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
1-methoxy-2-propanol	Short term Inhalation	553.5 mg/	Workers	Local
	Long term Dermal	50.6 mg/ kg bw/day	Workers	Systemic
	Long term Inhalation	369 mg/m <sup>3</sup>	Workers	Systemic
	Long term Dermal	18.1 mg/ kg bw/day	General population	Systemic
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## SECTION 8: Exposure controls/personal protection

	Long term	43.9 mg/m <sup>3</sup>		Systemic
	Inhalation		population [Consumers]	
	Long term Oral	3.3 mg/kg bw/day	General population [Consumers]	Systemic
ethylbenzene	Short term Inhalation	293 mg/m³	Workers	Local
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	77 mg/m³	Workers	Systemic
	Long term Inhalation	15 mg/m³	General population [Consumers]	Systemic
	Long term Oral	1.6 mg/kg bw/day	General population [Consumers]	Systemic
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

## **PNECs**

/lene	Fresh water Marine Sewage Treatment Plant Fresh water sediment	0.327 mg/l 0.327 mg/l 6.58 mg/l	-
	Sewage Treatment Plant	_	- -
	Plant	6.58 mg/l	-
	Fresh water sediment		1
	i lesti water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
utan-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	-
-methoxy-2-propanol	Fresh water	10 mg/l	-
, , ,	Marine	1 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	52.3 mg/kg dwt	_
	Marine water sediment	5.2 mg/kg dwt	-

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## **SECTION 8: Exposure controls/personal protection**

	Soil	5.49 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	Sewage Treatment	9.6 mg/l	-
	Plant		
	Fresh water sediment	13.7 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-
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	-
1			

#### 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 and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

## 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.

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber, Viton®, Barricade, CPF 3, Responder, PVC

Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, nitrile rubber, polyvinyl alcohol (PVA)

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

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

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## SECTION 8: Exposure controls/personal protection

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.

: If workers are exposed to concentrations above the exposure limit, they must use a **Respiratory protection** 

> 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

#### 9.1 Information on basic physical and chemical properties

**Appearance** 

**Physical state** : Liquid.

Colour : Various colours. **Odour** : Characteristic. **Odour threshold** Not applicable. pН : 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:

151.51°C (304.7°F)

Flash point : Closed cup: 25°C

**Evaporation rate** Highest known value: 0.84 (ethylbenzene) Weighted average: 0.7compared

with butyl acetate

Flammability (solid, gas) Upper/lower flammability or

explosive limits

: Not applicable. : 0.8 - 13.74%

Vapour pressure : Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted

average: 0.86 kPa (6.45 mm Hg) (at 20°C)

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

average: 4.26 (Air = 1)

**Density** : 1.25 to 1.32 g/cm<sup>3</sup>

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

Partition coefficient: n-octanol/: Not available.

water

**Auto-ignition temperature** : Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).

**Decomposition temperature** : Not available.

Kinematic ( $40^{\circ}$ C): >0.205 cm<sup>2</sup>/s (>20.5 mm<sup>2</sup>/s) **Viscosity** 

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

#### 9.2 Other information

No additional information.

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## 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.

## **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
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 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	-
epoxy resin (MW ≤ 700)	LD50 Dermal	Rabbit	20 g/kg	-
	LD50 Oral	Mouse	15600 mg/kg	-

#### **Acute toxicity estimates**

Route	ATE value	
Dermal	6207.37 mg/kg 9066.84 mg/kg 119.91 mg/l	

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
epoxy resin (MW 700-1200)	Skin - Mild irritant	Mammal - species	-	-	-
	Eyes - Mild irritant	unspecified Mammal -	_	_	_
		species unspecified			
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2	-

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## **SECTION 11: Toxicological information**

	Skin - Mild irritant	Rabbit	-	milligrams 500 milligrams	-
fatty acids, C14-18 and C16-18-unsatd., maleated	Skin - Mild irritant	Mammal - species unspecified	-	-	-

#### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW 700-1200)	skin	Mammal - species unspecified	Sensitising
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising
fatty acids, C14-18 and C16-18-unsatd., maleated	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	Not applicable.	Respiratory tract irritation
butan-1-ol	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
hydrocarbons, C9, aromatic	Category 3	Not applicable.	Narcotic effects
	Category 3	Not applicable.	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	Not applicable.	Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	hearing organs

#### **Aspiration hazard**

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1
hydrocarbons, C9, aromatic	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1

Other information : None identified.

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## **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
hydrocarbons, C9, aromatic	Acute EC50 <10 mg/l	Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
All all and a second	Acute LC50 <10 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 7.2 mg/l	Algae	48 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
epoxy resin (MW ≤ 700)	Acute LC50 4.2 mg/l	Fish	96 hours
	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

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

#### 12.2 Persistence and degradability

Not available.

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

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
butan-1-ol	1	-	low
hydrocarbons, C9, aromatic	-	10 to 2500	high
1-methoxy-2-propanol	<1	-	low
ethylbenzene	3.6	-	low
epoxy resin (MW ≤ 700)	2.64 to 3.78	31	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 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)

: 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 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	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III

Conforms to Regulation (EC) No. 453/2010 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830

#### Jotafloor Topcoat Comp A **SECTION 14: Transport information** 14.5 No. Yes. No. No. **Environmental** hazards

#### **Additional information**

ADR/RID : ADR/RID: Viscous substance. Not restricted, ref. chapter 2.2.3.1.5 (applicable to

receptacles < 450 litre capacity).

Hazard identification number 30

Tunnel code (D/E)

**ADN** The product is only regulated as an environmentally hazardous substance when

transported in tank vessels.

**IMDG** : IMDG: Viscous substance. Transport in accordance with paragraph 2.3.2.5

(applicable to receptacles < 450 litre capacity).

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 Annex II of Marpol and the IBC Code : 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** : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

**Other EU regulations** 

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.

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

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.

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## **SECTION 15: Regulatory information**

#### **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 (Annexes A, B, C, E)

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

assessment

: Not applicable.

#### **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.

1272/2008]

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]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

#### Full text of abbreviated H statements

H302 H304 H312 H315 H317 H318 H318 H319 H310 H310 H310 H311 H311 H311 H311 H311	H304 H312 H315 H317 H318	May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.
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## **SECTION 16: Other information**

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, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1, H317	SKIN SENSITISATION - Category 1
Skin Sens. 1B, H317	SKIN SENSITISATION - Category 1B
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED
	EXPOSURE - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
	(Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE
	(Narcotic effects) - 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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#### **Exposure Scenario: Use in coatings -Industrial use**

Sector of Use

**Process Category** : PROC05 PROC07 PROC08a PROC10

Environmental release category(ies) : ERC4

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

### Operational conditions and risk management measures

## Control of worker exposure

Frequency and duration of use	: Covers daily exposures up to 8 hours
General - Operational conditions	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
General - Risk management measures	: Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.

Type of activity or process	Risk management measures
Preparation of material for application	: Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
Roller, spreader, flow application	: Provide extract ventilation to points where emissions occur.
Spraying - Manual	: Carry out in a vented booth provided with laminar airflow. or Provide a good standard of controlled ventilation (10 to 15 air changes per hour). and Wear a respirator conforming to EN140 with type A/P2 filter or better.

### Control of environmental exposure

•	Control of environmental exposure		
	Organisational measures to prevent/limit release from site	: Prevent environmental discharge consistent with regulatory requirements.	
	Conditions and measures related to external treatment of waste for disposal	: External treatment and disposal of waste should comply with applicable local and/or national regulations. See Section 13 for additional waste treatment information.	
	Conditions and measures related to external recovery of waste	<ul> <li>External recovery and recycling of waste should comply with applicable local and/or national regulations.</li> </ul>	

#### Additional information

The exposure scenario for the mixture is based on the following substances:

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## **Exposure Scenario: Use in coatings - Professional use**

Sector of Use : Professional use

Process Category : PROC05 PROC08a PROC10 PROC11

Environmental release category(ies) : ERC8a ERC8d

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

### Operational conditions and risk management measures

#### Control of worker exposure

Frequency and duration of use	: Covers daily exposures up to 8 hours
General - Operational conditions	: Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
General - Risk management measures	: Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.
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	for information on appropriate personal protective equipment.
Type of activity or process	Risk management measures
Preparation of material for application - Indoor	: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Avoid carrying out activities involving exposure for more than 1 hour per day. or Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with type A/P2 filter or better.
Preparation of material for application - Outdoor	: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour or Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Equipment cleaning and maintenance	: Drain down system prior to equipment break-in or maintenance. Avoid carrying out activities involving exposure for more than 4 hours per day.
Roller, spreader, flow application - Indoor	: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with type A/P2 filter or better.
Roller, spreader, flow application - Outdoor	: Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Spraying - Manual - Indoor	: Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Spraying - Manual - Outdoor	: Ensure operation is undertaken outdoors. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.

## Control of environmental exposure

Organisational measures to prevent/limit release from site	: Prevent environmental discharge consistent with regulatory requirements.
Conditions and measures related to external treatment of waste for disposal	: External treatment and disposal of waste should comply with applicable local and/or national regulations. See Section 13 for additional waste treatment information.
Conditions and measures related to external recovery of waste	<ul> <li>External recovery and recycling of waste should comply with applicable local and/or national regulations.</li> </ul>

#### Additional information

The exposure scenario for the mixture is based on the following substances:

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