

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

1.1 Product identifier	
Product name	: Jotaprime Mastic Comp A
Product code	: 4720
Product description	: Paint.
Product type	: Liquid.
Other means of identification	: Not available.

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

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

#### See Annex to the Safety data sheet for additional information in the Exposure Scenario(s).

#### 1.3 Details of the supplier of the safety data sheet

Jotun Saudia Co Ltd. P.O. Box 34698 Jeddah 21478 Kingdom of Saudi Arabia Tel: +966 2 6350535 Fax: +966 2 6362483 SDSJotun@jotun.com

#### 1.4 Emergency telephone number

SHE Dept. Jotun AS, Norway +47 33 45 70 00

# **SECTION 2: Hazards identification**

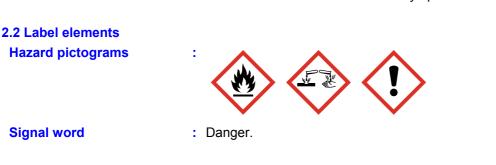
#### 2.1 Classification of the substance or mixture

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

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.



Other hazards which do

not result in classification

SECTION 2: Hazards	ic	lentification
Hazard statements	:	<ul> <li>H226 - Flammable liquid and vapour.</li> <li>H318 - Causes serious eye damage.</li> <li>H315 - Causes skin irritation.</li> <li>H317 - May cause an allergic skin reaction.</li> <li>H335 - May cause respiratory irritation.</li> </ul>
Precautionary statements		
General	:	Not applicable.
Prevention	:	<ul> <li>P261 - Avoid breathing vapour.</li> <li>P280 - Wear protective gloves. Wear eye or face protection.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P271 - Use only outdoors or in a well-ventilated area.</li> </ul>
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.
Storage	;	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	:	xylene epoxy resin (MW 700-1200) Phenol, methylstyrenated 2-methylpropan-1-ol
Supplemental label elements	:	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	en	<u>ts</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.
2.3 Other hazards		

# **SECTION 3: Composition/information on ingredients**

: None known.

Product/ingredient name	Identifiers	Weight %	Regulation (EC) No. 1272/2008 [CLP]	Туре
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	[1] [2]
epoxy resin (MW 700-1200)	CAS: 25036-25-3	≥10 - ≤25	Skin Irrit. 2, H315	[1]

			Eye Irrit. 2, H319 Skin Sens. 1, H317	
Phenol, methylstyrenated	REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1	≤10	Skin Irrit. 2, H315 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	≤10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]
			See Section 16 for the full text of the H statements declared above.	

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

#### Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance 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

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

# **SECTION 4: First aid measures**

4.1 Description of first aid me	asures
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

## **SECTION 4: First aid measures**

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

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

Contains epoxy resin (MW 700-1200), Phenol, methylstyrenated. May produce an allergic reaction.

#### 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)

# **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 fi	rom	the substance or mixture
Hazards from the substance or mixture	:	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective	:	Appropriate breathing apparatus may be required.

# **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	1	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".	

## **SECTION 6: Accidental release measures**

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	<ul> <li>See Section 1 for emergency contact information.</li> <li>See Section 8 for information on appropriate personal protective equipment.</li> <li>See Section 13 for additional waste treatment information.</li> </ul>

# **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.

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	21/2i	lable.
 INUL	avai	iavic.

Recommendations		
Industrial sector specific	:	1
solutions		

: Not available.

# **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	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 442 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.		
ethylbenzene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 442 mg/m <sup>3</sup> 8 hours. STEL: 200 ppm 15 minutes. STEL: 884 mg/m <sup>3</sup> 15 minutes.		

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.
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#### **DNELs/DMELs**

Product/ingredient name	Exposure	Value	Population	Effects
xylene	Short term	289 mg/m <sup>3</sup>	Workers	Systemic
	Inhalation	_		
	Short term	289 mg/m <sup>3</sup>	Workers	Local
	Inhalation			
	Long term Dermal	180 mg/kg	Workers	Systemic
	-	bw/day		
	Long term	77 mg/m³	Workers	Systemic
	Inhalation	Ū		
	Long term Dermal	108 mg/kg	Consumers	Systemic
		bw/day		-
	Long term	14.8 mg/m <sup>3</sup>	Consumers	Systemic
	Inhalation	0		
	Long term Oral	1.6 mg/kg	Consumers	Systemic
	Ũ	bw/day		
Phenol, methylstyrenated	Long term Dermal	16.4 mg/	Workers	Systemic
	Ũ	kg bw/day		
	Long term	57 mg/m <sup>3</sup>	Consumers	Systemic
	Inhalation	Ū		-
	Long term Dermal	8 mg/kg	Consumers	Systemic
	U U	bw/day		,
	Long term	28 mg/m <sup>3</sup>	Consumers	Systemic
	Inhalation	Ū		-
	Long term Oral	4 mg/kg	Consumers	Systemic
	Ŭ	bw/day		,
2-methylpropan-1-ol	Long term	310 mg/m <sup>3</sup>	Workers	Local
·	Inhalation	Ū		
te of issue/Date of revision : 27.02.20	19 Date of previous issue	: 27.02.2	019	Version : 1.01 6

	Long term Oral	25 mg/kg bw/day	Consumers	Systemic
	Long term Inhalation	55 mg/m³	Consumers	Local
ethylbenzene	Short term Inhalation	293 mg/m <sup>3</sup>	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	Consumers	Systemic
	Long term Oral	1.6 mg/kg bw/day	Consumers	Systemic

# **PNECs**

Product/ingredient name	<b>Compartment Detail</b>	Value	Method Detail
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	-
Phenol, methylstyrenated	Fresh water	14 µg/l	-
	Marine	1.4 µg/l	-
	Sewage Treatment	2.4 mg/l	-
	Plant	U U	
	Fresh water sediment	52.9 mg/kg dwt	-
	Marine water sediment	5.3 mg/kg dwt	-
	Soil	10.5 mg/kg dwt	-
2-methylpropan-1-ol	Fresh water	0.4 mg/l	-
	Marine	0.04 mg/l	-
	Sewage Treatment	10 mg/l	-
	Plant	U U	
	Fresh water sediment	1.52 mg/kg dwt	-
	Marine water sediment	0.152 mg/kg dwt	-
	Soil	0.0699 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	-

8.2 Exposure controls Appropriate engineering controls	a tl	ichieved by hese are no	the use of t sufficient	ilation. Whe local exha to maintai L, suitable i	ust ventila n concenti	tion and grations of	good gene particulat	eral extra	ction. If	
Individual protection meas	<u>ures</u>									
Hygiene measures	e A C C	eating, smo Appropriate Contaminate contaminate	king and us techniques ed work clo ed clothing	and face t sing the lav s should be othing shou before reus ne workstat	atory and used to re Id not be a sing. Ensu	at the en- emove po allowed or ure that e	d of the w otentially c ut of the w	orking pe contamina /orkplace	eriod. ated cloti . Wash	hing.
Eye/face protection	: เ	Jse safety e	eyewear de	signed to p	protect aga	ainst spla	sh of liqui	ds.		
Skin protection										
Date of issue/Date of revision		: 27.02.2019	Date of pre	evious issue	: 27	.02.2019		Version	: 1.01	7/17

# **SECTION 8: Exposure controls/personal 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: Viton®, Responder, nitrile rubber, 4H, Teflon May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber, PVC, 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.

# **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.
рН	: 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: 160.05°C (320.1°F)
Flash point	: Closed cup: 25°C
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.76compared with butyl acetate
Flammability (solid, gas)	: Not applicable.
Upper/lower flammability or explosive limits	: 0.8 - 10.9%

# **SECTION 9: Physical and chemical properties**

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Vapour pressure	:	Highest known value: <1.6 kPa (<12 mm Hg) (at 20°C) (2-methylpropan-1-ol). Weighted average: 0.89 kPa (6.68 mm Hg) (at 20°C)
Vapour density	:	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.45 (Air = 1)
Density	1	1.35 to 1.41 g/cm <sup>3</sup>
Solubility(ies)	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	:	Lowest known value: >385°C (>725°F) (Phenol, methylstyrenated).
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s)
Explosive properties	:	Not available.
Oxidising properties	:	Not available.

#### 9.2 Other information

No additional information.

SECTION 10: Stabilit	SECTION 10: Stability and reactivity				
10.1 Reactivity	No specific test data related to reactivity available for this product or its ingr	redients.			
10.2 Chemical stability	Stable under recommended storage and handling conditions (see Section 7	7).			
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not o	occur.			
10.4 Conditions to avoid	When exposed to high temperatures may produce hazardous decomposition products.	on			
10.5 Incompatible materials	Keep away from the following materials to prevent strong exothermic reacti oxidising agents, strong alkalis, strong acids.	ions:			
10.6 Hazardous decomposition products	Decomposition products may include the following materials: carbon mono: carbon dioxide, smoke, oxides of nitrogen.	xide,			

# **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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

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

Contains epoxy resin (MW 700-1200), Phenol, methylstyrenated. May produce an allergic reaction. Acute toxicity

# **SECTION 11: Toxicological information**

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	-
2-methylpropan-1-ol	LC50 Inhalation Vapour	Rat	19200 mg/m <sup>3</sup>	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	2460 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

# **Conclusion/Summary** : Not available.

#### Acute toxicity estimates

Route	ATE value	
	6540.3 mg/kg	
Inhalation (vapours)	49.05 mg/l	

Irritation/Corrosion	
<b>Conclusion/Summary</b>	: Not available.
Sensitisation	
<b>Conclusion/Summary</b>	: Not available.
Mutagenicity	
<b>Conclusion/Summary</b>	: Not available.
<b>Carcinogenicity</b>	
<b>Conclusion/Summary</b>	: Not available.
Reproductive toxicity	
<b>Conclusion/Summary</b>	: Not available.
<b>Teratogenicity</b>	
<b>Conclusion/Summary</b>	: Not available.
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#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	Not applicable.	Respiratory tract irritation
2-methylpropan-1-ol	Category 3	Not applicable.	Respiratory tract irritation and 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	
ethylbenzene	ASPIRATION HAZARD - Category 1	

#### **Other information**

: Not available.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

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

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

Product/ingredient name	Result	Species	Exposure
2-methylpropan-1-ol ethylbenzene	Chronic NOEC 4000 µg/l Fresh water Acute EC50 7.2 mg/l Acute EC50 2.93 mg/l Acute LC50 4.2 mg/l	Daphnia - Daphnia magna Algae Daphnia Fish	21 days 48 hours 48 hours 96 hours

**Conclusion/Summary** : No known significant effects or critical hazards.

#### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

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

#### **12.3 Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
Phenol, methylstyrenated	3.627	-	low
2-methylpropan-1-ol	1	-	low
ethylbenzene	3.6	-	low

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

12.5 Results	of PBT	and vPvB	assessment
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PBT	: Not applicable.
vPvB	: Not applicable.

12.6 Other adverse effects

SECTION 13: Disposal considerations

: No known significant effects or critical hazards.

# 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	: The classification of the product may meet the criteria for a hazardous waste.	
Date of issue/Date of revision	: 27.02.2019 Date of previous issue : 27.02.2019 Version : 1.01 11/17	

# **SECTION 13: Disposal considerations**

	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	
P	ackaging		
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	<ul> <li>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.</li> </ul>	
	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 ΙΑΤΑ 14.1 UN number 1263 1263 1263 1263 14.2 UN proper Paint Paint Paint Paint shipping name 14.3 Transport 3 3 3 3 hazard class(es) Ш Ш Ш Ш 14.4 Packing group No. No. 14.5 No. No. **Environmental** hazards **Additional Tunnel** restriction Emergency information code: (D/E) schedules (EmS) Hazard identification F-E, <u>S-E</u> number: 30

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.

# SECTION 14: Transport information

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.

: Not applicable. Annex XVII - Restrictions on the manufacture,

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

**Other EU regulations** 

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: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

#### : Not available. VOC for Ready-for-Use

**Mixture** 

**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.

#### **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.

# **SECTION 15: Regulatory information**

**15.2 Chemical safety** assessment

: Not applicable.

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	<ul> <li>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</li> </ul>

#### 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

Full text of abbreviated H statements

H225 H226	Highly flammable liquid and vapour.
	Flammable liquid and vapour.
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.
H412	Harmful to aquatic life with long lasting effects.

#### Full text of classifications [CLP/GHS]

Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Chronic 3, H412	LONG-TERM 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
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
Date of printing : 27.02.20	19
Date of issue/ Date of : 27.02.20	19
revision	

Date of issue/Date of revision

## **SECTION 16: Other information**

Date of previous issue	: 27.02.2019
Version	: 1.01

#### 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.



Exposure Scenario: Use in	coatings -	Industrial use
Sector of Use	: Industrial use	
Process Category	: PROC05 PROC	C07 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, unless stated differently. 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 exp	osure
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	: External recovery and recycling of waste should comply with applicable local and/or national regulations.
Additional information	

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

REACH #: 01-2119488216-32



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, unless stated differently. 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 - 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. 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.
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. Avoid carrying out activities involving exposure for more than 4 hours.

# 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. Conditional measures related to external recovery of waste : External recovery and recycling of waste should comply with applicable local and/or national regulations. Additional information : Additional information

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

REACH #: 01-2119488216-32