

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

1.1 Product identifier	
Product name	: Jotamastic 80 Wintergrade Comp B
Product code	: 6520
Product description	: Hardener.
Product type	: Liquid.
Other means of identification	: Not available.
UFI	: DS1K-90U8-Y00Q-RMJ5
1.2 Relevant identified use	es of the substance or mixture and uses advis

sed 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 Paints (Europe) Ltd. Stather Road Flixborough, Scunthorpe North Lincolnshire **DN15 8RR** England

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

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Tel: +44 17 24 40 00 00 Fax: +44 17 24 40 01 00

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 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



SECTION 2: Hazards identification

Signal word	1	Danger.
Hazard statements	:	 H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H335 - May cause respiratory 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. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or 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 doctor.
Storage		P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	Phenol, polymer with formaldehyde, glycidyl ether, polymers with [(methylphenoxy) methyl]oxirane and triethylenetetramine xylene butan-1-ol 2,4,6-tris(dimethylaminomethyl)phenol
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	er	<u>its</u>
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 not result in classification	:	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Product/ingredient name	Mixture Identifiers	Weight %	Regulation (EC) No. 1272/2008 [CLP]	Туре
Phenol, polymer with formaldehyde, glycidyl ether, polymers with [(methylphenoxy) methyl]oxirane and triethylenetetramine	EC: 620-324-1 CAS: 99377-78-3	≥50 - ≤75	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 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥10 - <20	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]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
2,4,6-tris(dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	≤3	Skin Corr. 1C, H314 Eye Dam. 1, H318	[1]
			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.

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	: 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.

SECTION 4: First aid measures

Inhalation	 Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

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

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. 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 nonallergic 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
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 imme	diate medical attention and special treatment needed
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures 5.1 Extinguishing media		
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.			ducts may	
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SECTION 5: Firefighting measures

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, pro	ve equipment and emergency procedures	
For non-emergency personnel	clude sources of ignition and ventilate the area. Avoid breathing efer to protective measures listed in sections 7 and 8.	vapour or mist.
For emergency responders	specialised clothing is required to deal with the spillage, take note formation in Section 8 on suitable and unsuitable materials. See formation in "For non-emergency personnel".	
6.2 Environmental precautions	o not allow to enter drains or watercourses. If the product contam rers, or sewers, inform the appropriate authorities in accordance gulations.	
6.3 Methods and material for containment and cleaning up	ontain and collect spillage with non-combustible, absorbent mate arth, vermiculite or diatomaceous earth and place in container for cording to local regulations (see Section 13). Preferably clean wi void using solvents.	disposal
6.4 Reference to other sections	ee Section 1 for emergency contact information. ee Section 8 for information on appropriate personal protective ec ee Section 13 for additional waste treatment information.	quipment.

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

SECTION 7: Handling and storage

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: 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	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.		
	STEL: 441 mg/m ³ 15 minutes.		
	STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours.		
	TWA: 220 mg/m ² 8 hours.		
butan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed		
	through skin.		
	STEL: 154 mg/m ³ 15 minutes.		
	STEL: 50 ppm 15 minutes.		
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed		
	through skin.		
	STEL: 552 mg/m ³ 15 minutes.		
	STEL: 125 ppm 15 minutes.		
	TWA: 100 ppm 8 hours.		
	TWA: 441 mg/m ³ 8 hours.		

procedures 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	Long term Oral	1.6 mg/kg	General	Systemic
-		bw/day	population	
	Long term	14.8 mg/m ³	General	Systemic
	Inhalation	_	population	-
	Long term	77 mg/m³	Workers	Systemic
	Inhalation			
	Long term Dermal	108 mg/kg	General	Systemic
		bw/day	population	
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Short term	289 mg/m ³	Workers	Local
	Inhalation	200 mg/m	TT OILLOID	Loodi
	Short term	289 mg/m ³	Workers	Systemic
	Inhalation	,		2,000
butan-1-ol	Long term	310 mg/m ³	Workers	Local
	Inhalation			
	Long term Oral	3.125 mg/	General	Systemic
	5	kg bw/day	population	,
		5 7	[Consumers]	
	Long term	55 mg/m³	General	Local
	Inhalation	U U	population	
			[Consumers]	
	Long term Oral	3.125 mg/	General	Systemic
		kg bw/day	population	-
	Long term	55 mg/m ³	General	Local
	Inhalation		population	
	Long term	310 mg/m ³	Workers	Local
	Inhalation			
ethylbenzene	Long term Oral	1.6 mg/kg	General	Systemic
		bw/day	population	
	Long term	15 mg/m³	General	Systemic
	Inhalation		population	
	Long term	77 mg/m³	Workers	Systemic
	Inhalation	100		O. united and
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Short term	293 mg/m ³	Workers	Local
	Inhalation	200 mg/m		
	Long term	442 mg/m ³	Workers	Local
	Inhalation			
	Short term	884 mg/m ³	Workers	Systemic
	Inhalation			
2,4,6-tris(dimethylaminomethyl)phenol	Long term Dermal	0.2 mg/kg	Workers	Systemic
, , (bw/day		
	Long term	0.31 mg/m ³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
butan-1-ol	Fresh water	0.082 mg/l	-
	Marine	0.0082 mg/l	-
	Sewage Treatment	2476 mg/l	-
	Plant		
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	Fresh water sediment	0.178 mg/kg dwt	-
	Marine water sediment	0.0178 mg/kg dwt	-
	Soil	0.015 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	-
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0.084 mg/l	-
	Marine	0.0084 mg/l	-
	Sewage Treatment	0.2 mg/l	-
	Plant	-	

8.2 Exposure controls Appropriate engineering : Provide adequate ventilation. Where reasonably practicable, this should be controls 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. **Eve/face protection** : Safety evewear 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. Not recommended, gloves(breakthrough time) < 1 hour: PE Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, polyvinyl alcohol (PVA), nitrile rubber May be used, gloves(breakthrough time) 4 - 8 hours: Viton®, Barricade, CPF 3, Responder, PVC, neoprene, butyl rubber 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.

SECTION 8: Exposure controls/personal protection

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
<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Clear.
Odour	: Characteristic.
Odour threshold	: Not applicable.
рН	: 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: 131.86°C (269.3°F)
Flash point	: Closed cup: 30°C
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.7compared with butyl acetate
Flammability (solid, gas)	: Not applicable.
Upper/lower flammability or explosive limits	: 0.8 - 11.3%
Vapour pressure	: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.93 kPa (6.98 mm Hg) (at 20°C)
Vapour density	: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.42 (Air = 1)
Density	: 1.01 g/cm ³
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: 355°C (671°F) (butan-1-ol).
Decomposition temperature	: Not available.
Viscosity	: Kinematic (40°C): >0.205 cm²/s (>20.5 cSt)
Explosive properties	: Not available.
Oxidising properties	: Not available.

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 10.4 Conditions to avoid 10.5 Incompatible materials 10.6 Hazardous decomposition products 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. When exposed to high temperatures may produce hazardous decomposition products. Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen. 		-	
 10.3 Possibility of hazardous reactions 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, 	10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
 hazardous reactions 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, 	10.2 Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
 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, 		1	Under normal conditions of storage and use, hazardous reactions will not occur.
oxidising agents, strong alkalis, strong acids.10.6 Hazardous: Decomposition products may include the following materials: carbon monoxide,	10.4 Conditions to avoid	1	
	10.5 Incompatible materials	1	
		1	

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	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
,	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
2,4,6-tris	LD50 Oral	Rat	1673 mg/kg	-
(dimethylaminomethyl) phenol				

Acute toxicity estimates

Route	ATE value		
Dermal	5000 mg/kg 4888.89 mg/kg 64.67 mg/l		

Irritation/Corrosion

Product/ingredient name	Exposure	Species	Score	Exposure	Observation
Phenol, polymer with formaldehyde, glycidyl ether, polymers with [(methylphenoxy)methyl] oxirane and triethylenetetramine	Skin - Mild irritant	Mammal - species unspecified	-	-	-
	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
2,4,6-tris (dimethylaminomethyl)	Eyes - Severe irritant	Rabbit	-	24 hours 50 µg	-

SECTION 11: Toxicological information

phenol	Skin - Severe irritant	Rat	-	0.25 ml	-

Product/ingredient name	Route of exposure	Species	Result
Phenol, polymer with formaldehyde, glycidyl ether, polymers with [(methylphenoxy)methyl] oxirane and triethylenetetramine	skin	Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

Fertility effects

No known significant effects or critical hazards.

Reproductive toxicity
Developmental effects

: No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

Product/ingredient name	Result
xylene ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
5	

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.

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
Phenol, polymer with formaldehyde, glycidyl ether, polymers with [(methylphenoxy)methyl] oxirane and triethylenetetramine	Acute LC50 9 mg/l	Fish	96 hours
xylene	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
ethylbenzene	Acute LC50 13400 µg/l Fresh water Acute EC50 7700 µg/l Marine water Acute EC50 2.93 mg/l Acute LC50 4.2 mg/l	Fish - Pimephales promelas Algae - Skeletonema costatum Daphnia Fish	96 hours 96 hours 48 hours 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
xylene ethylbenzene	-		Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene butan-1-ol ethylbenzene 2,4,6-tris (dimethylaminomethyl) phenol	3.12 1 3.6 0.219	8.1 to 25.9 - - -	low low low low

12.4	Mobi	lity	in	soil	
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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.

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

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	Product	
and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be	Methods of disposal	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

SECTION 13: Disposal considerations

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	ΙΑΤΑ
14.1 UN number	UN1866	UN1866	UN1866	UN1866
14.2 UN proper shipping name	Resin solution	Resin solution	Resin solution. Marine pollutant (Phenol, polymer with formaldehyde, glycidyl ether, polymers with [(methylphenoxy) methyl]oxirane and triethylenetetramine)	Resin solution
14.3 Transport hazard class(es)	3	3		3
14.4 Packing group	III	111		111
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

SECTION 14: Transport information

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	1	The environmentally hazardous substance mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$.
IMDG	1	The marine pollutant mark is not required when transported in sizes of \leq 5 L or \leq 5 kg. Emergency schedules F-E, <u>S-E</u>
ΙΑΤΑ	:	The environmentally hazardous substance mark may appear if required by other transportation regulations.
14.6 Special precautions for user	:	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 substa	ances subject to authorisation
Annex XIV	
None of the components a	are listed.
Substances of very high	concern
None of the components a	are listed.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Other EU regulations	
VOC	: 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 applicable.
Europe inventory	: At least one component is not listed.
Ozone depleting substand Not listed.	<u>ces (1005/2009/EU)</u>
Prior Informed Consent (F Not listed.	<u>PIC) (649/2012/EU)</u>
Seveso Directive This product may add to the major accident hazards. National regulations	e calculation for determining whether a site is within the scope of the Seveso Directive on

<u>Nutional regulations</u>	
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.

Date of issue/Date of revision

SECTION 15: Regulatory information

International regulations

<u>Chemical Weapon Convention List Schedules I, II & III Chemicals</u> 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 a	applicable.
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assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	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
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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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.
Date of issue/Date of revision	: 30.09.2021 Date of previous issue : 14.03.2019 Version : 2 15/1

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SECTION 16: Other information		
H412		Harmful to aquatic life with long lasting effects.
Full text of classifications	[CLP/GHS]	
Acute Tox. 4		ACUTE TOXICITY - Category 4
Aquatic Chronic 2		LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3		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 Corr. 1C		SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2		SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1		SKIN SENSITISATION - Category 1
STOT RE 2		SPECIFIC TARGET ORGAN TOXICITY - REPEATED
		EXPOSURE - Category 2
STOT SE 3		SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE -
		Category 3
Date of printing	: 30.09.2021	
Date of issue/ Date of	: 30.09.2021	
revision		
Date of previous issue	: 14.03.2019	
Version	: 2	
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 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 or 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	: 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.

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	: 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 REACH #: 01-2119456619-26 (from Comp A)



E	xposure Scenario: Use in	coatings -	Professional use
S	ector of Use	: Professional use	
Р	rocess Category	: PROC05 PROC0	8a PROC10 PROC11
Е	nvironmental 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.
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.
	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 per day.
	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 full-face respirator conforming to EN136 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 full-face respirator conforming to EN136 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 : 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 evenestic for the mixture is based on the following substances:

The exposure scenario for the mixture is based on the following substances: REACH #: 01-2119488216-32 REACH #: 01-2119456619-26 (from Comp A)