

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

1.1 Product identifier	
Product name	: Vinyguard Silvergrey 88
Product code	: 765
Product description	: Paint.
Product type	: Liquid.
Other means of identification	: Not available.
UFI	: 0P32-G0KP-900N-VYXV
1.2 Relevant identified us	es of the substance or mixture and uses advised against
Use in coatings - Industri	al 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 Tel: + 47 33 45 70 00

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1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Product definition : Mixture

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (hearing organs) 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

SECTION 2: Hazards	IC	lentification
Signal word	:	Warning.
Hazard statements	•	 H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H373 - May cause damage to organs through prolonged or repeated exposure. (hearing organs) 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. P260 - Do not breathe vapour or spray.
Response	:	 P391 - Collect spillage. P314 - Get medical advice/attention if you feel unwell. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	:	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	:	xylene ethylbenzene
Supplemental label elements	:	Contains fatty acids, C18-unsatd., trimers, compds. with oleylamine and Fatty acids, tall-oil, compds. with oleylamine. May produce an allergic reaction.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	en	<u>ts</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	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.

3.2 Mixtures : Product/ingredient name	Mixture 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	≥25 - ≤50	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]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥10 - ≤24	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≤5	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
hydrocarbons, C9, aromatics	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 128601-23-0	≤3	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
			See Section 16 for the full text of the H statements declared above.	

SECTION 3: Composition/information on ingredients

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

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

[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 me	eas	ures
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	1	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	1	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.

SECTION 4: First aid measures

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.

4.2 Most important symptoms and effects, both acute and delayed

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

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Ingestion may cause nausea, diarrhea and vomiting.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
4.3 Indication of any imm	ediate 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 ₂ , powders, water spray.
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising fi	om 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.

Date of issue/Date of revision

SECTION 5: Firefighting measures

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	tive equipment and emergency procedures	
For non-emergency personnel	Exclude sources of ignition and ventilate the area. Avoid breathing Refer to protective measures listed in sections 7 and 8.	vapour or mist.
For emergency responders	If specialised clothing is required to deal with the spillage, take note information in Section 8 on suitable and unsuitable materials. See information in "For non-emergency personnel".	•
6.2 Environmental precautions	Do not allow to enter drains or watercourses. If the product contam rivers, or sewers, inform the appropriate authorities in accordance v regulations.	
6.3 Methods and material for containment and cleaning up	Contain and collect spillage with non-combustible, absorbent mater earth, vermiculite or diatomaceous earth and place in container for according to local regulations (see Section 13). Preferably clean wi Avoid using solvents.	disposal
6.4 Reference to other sections	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective ec See Section 13 for additional waste treatment information.	ιuipment.

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.

SECTION 7: Handling and storage

7.3 Specific end use(s)

Recommendations Industrial sector specific : Not available. solutions

: Not available.

SECTION 8: Exposure controls/personal protection

required.

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: 50 ppm 8 hours.
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 of of the ventilat protective equilation the following: the assessme limit values a atmospheres of exposure t	t contains ingredients with exposure limits, personal, workplace or biological monitoring may be required to determine the effectiveness ion or other control measures and/or the necessity to use respiratory uipment. Reference should be made to monitoring standards, such as European Standard EN 689 (Workplace atmospheres - Guidance for ent of exposure by inhalation to chemical agents for comparison with nd measurement strategy) European Standard EN 14042 (Workplace - Guide for the application and use of procedures for the assessment o chemical and biological agents) European Standard EN 482 tmospheres - 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

DNELs/DMELs

Product/ingredient n	ame	Exposure	Value	Population	Effects
xylene		Long term Oral	1.6 mg/kg bw/day	General population	Systemic
		Long term Inhalation	14.8 mg/m ³	General population	Systemic
		Long term Inhalation	77 mg/m³	Workers	Systemic
		Long term Dermal	108 mg/kg bw/day	General population	Systemic
		Long term Dermal	180 mg/kg bw/day	Workers	Systemic
		Short term Inhalation	289 mg/m ³	Workers	Local
		Short term Inhalation	289 mg/m³	Workers	Systemic
ethylbenzene		Long term Oral	1.6 mg/kg bw/day	General population	Systemic
		Long term Inhalation	15 mg/m ³	General population	Systemic
e of issue/Date of revision	: 20.12.2021	Date of previous issue	: 09.09.20	021	/ersion : 2.01 6

ECTION 8: Exposure cont	rols/personal prote	ction		
-	Long term Inhalation	77 mg/m³	Workers	Systemic
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	Short term Inhalation	293 mg/m ³	Workers	Local
	Long term Inhalation	442 mg/m ³	Workers	Local
	Short term Inhalation	884 mg/m³	Workers	Systemic
zinc oxide	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	5 mg/m³	Workers	Systemic
	Long term Dermal	83 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	2.5 mg/m ³	General population [Consumers]	Systemic
	Long term Oral	0.83 mg/ kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	0.5 mg/m³	Workers	Local
	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	Long term Inhalation	2.5 mg/m ³	General population	Systemic
	Long term Inhalation	5 mg/m³	Workers	Systemic
	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
hydrocarbons, C9, aromatics	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	Long term Inhalation	150 mg/m ³	Workers	Systemic
	Long term Dermal	11 mg/kg bw/day	General population [Consumers]	Systemic
	Long term Inhalation	32 mg/m³	General population [Consumers]	Systemic
	Long term Oral	11 mg/kg bw/day	General population [Consumers]	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
,	Marine	0.01 mg/l	-
	Sewage Treatment Plant	9.6 mg/l	-
te of issue/Date of revision : 20.12.20	21 Date of previous issue	: 09.09.2021	Version : 2.01

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SECTION 8: Exposu	re controls	personal protection	on	
		Fresh water sediment Soil	13.7 mg/kg dwt 2.68 mg/kg dwt	-
		Secondary Poisoning	20 mg/kg	_
zinc oxide		Fresh water	20.6 µg/l	
		Marine	6.1 µg/l	_
		Sewage Treatment	52 µg/l	_
		Plant	02 µg/1	
		Fresh water sediment	117.8 mg/kg dwt	_
		Marine water sediment	56.5 mg/kg dwt	-
		Soil	35.6 mg/kg dwt	-
3.2 Exposure controls Appropriate engineering controls	achieved by	equate ventilation. Where re the use of local exhaust ve ot sufficient to maintain con	entilation and good g	general extraction. If
	vapours below the OEL, suitable respiratory protection must be worn.			
Individual protection meas	<u>ures</u>			
Hygiene measures	eating, smo Appropriate Wash conta	s, forearms and face thorou king and using the lavatory techniques should be used minated clothing before reu rers are close to the worksta	and at the end of th I to remove potentia using. Ensure that e	e working period. Ily contaminated clothing.
Eye/face protection	indicates the dusts. If co	vear complying to EN 166 s is is necessary to avoid exp ntact is possible, the followi t indicates a higher degree	osure to liquid splasing protection should	shes, mists, gases or d be worn, unless the
Skin protection				
	T 1			

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, PVC Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, polyvinyl alcohol (PVA), fluor rubber, nitrile 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.
dy protection	: Personnel should wear antistatic clothing made of natural fibres or of high-

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.

SECTION 8: Exposure controls/personal protection

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 physica	l a	nd chemical properties
<u>Appearance</u>		
Physical state	1	Liquid.
Colour	1	Aluminium, ,Aluminium red toned
Odour	1	Characteristic.
Odour threshold	1	Not applicable.
рН	1	Not applicable.
Melting point/freezing point	1	Not applicable.
Initial boiling point and boiling range	:	Lowest known value: 136.1°C (277°F) (ethylbenzene). Weighted average: 137.56°C (279.6°F)
Flash point	:	Closed cup: 28°C
Evaporation rate	:	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79compared with butyl acetate
Flammability (solid, gas)	1	Not applicable.
Upper/lower flammability or explosive limits	:	0.8 - 7.6%
Vapour pressure	:	Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.98 kPa (7.35 mm Hg) (at 20°C)
Vapour density	1	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)
Density	1	1.13394 to 1.14519 g/cm ³
Solubility(ies)	1	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	:	Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics).
Decomposition temperature	1	Not available.
Viscosity	1	Kinematic (40°C): >0.205 cm²/s (>20.5 cSt)
Explosive properties	4	Not available.
Oxidising properties	4	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients	s.		
10.2 Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).			
10.3 Possibility of hazardous reactions	1	der normal conditions of storage and use, hazardous reactions will not occur.			
10.4 Conditions to avoid	1	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.			
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SECTION 10: Stability and reactivity

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	-
ethylbenzene	TDLo Dermal	Rabbit	4300 mg/kg	-
	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-

Acute toxicity estimates

Route	ATE value
	3211.96 mg/kg 42.49 mg/l

Irritation/Corrosion

Product/ingredient name	Exposure	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60	-
				microliters	
zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	

Sensitisation

Based on available data, the classification criteria are not met.

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

Fertility effects

No known significant effects or critical hazards.

Reproductive toxicity

: No known significant effects or critical hazards.

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

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
hydrocarbons, C9, aromatics	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

SECTION 11: Toxicological information

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 hydrocarbons, C9, aromatics	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1
Other information : None identified.	

SECTION 12: Ecological information

12.1 Toxicity

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

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

Product/ingredient name	Result	Species	Exposure
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
zinc oxide	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.02 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
hydrocarbons, C9, aromatics	Acute EC50 <10 mg/l	Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours

Water polluting material. May be harmful to the environment if released in large quantities. 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	-		Readily
ethylbenzene	-		Readily
zinc oxide	-		Not readily
hydrocarbons, C9, aromatics	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
zinc oxide	-	28960	high
hydrocarbons, C9, aromatics	-	10 to 2500	high

12.4 Mobility in soil

SECTION 12: Ecological information

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.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

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

European waste catalogue (EWC)

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

Waste code	Waste designation	
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances	
Packaging		
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.	
Disposal considerations	 Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions. 	

Result	European waste catalogue (EWC)	
CEPE Paint Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances
Special precautions	taken when Empty conta residues ma container. I thoroughly in	al and its container must be disposed of in a safe way. Care should be handling emptied containers that have not been cleaned or rinsed out. ainers or liners may retain some product residues. Vapour from product ay create a highly flammable or explosive atmosphere inside the Do not cut, weld or grind used containers unless they have been cleaned internally. Avoid dispersal of spilt material and runoff and contact with ays, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint. Marine pollutant (zinc oxide)	Paint
14.3 Transport hazard class(es)		3	3	3
14.4 Packing group	111	111	111	111
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information		
ADR/RID	:	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Hazard identification number</u> 30 <u>Tunnel code</u> (D/E)
ADN	:	The environmentally hazardous substance mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$.
IMDG	:	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 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

SECTION 15: Regulatory information

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VOC	1	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	1	Not applicable.
Europe inventory	1	At least one component is not listed.
Industrial emissions (integrated pollution prevention and control) - Air	:	Listed
Industrial emissions (integrated pollution prevention and control) - Water	:	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

<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 assessment

: Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

SECTION 16: Other information

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 Irrit. 2, H319	Calculation method
STOT SE 3, H335	Calculation method
STOT RE 2, H373 (hearing organs)	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.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4 Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Asp. Tox. 1 Eye Irrit. 2 Flam. Liq. 2 Flam. Liq. 3 Skin Irrit. 2 STOT RE 2 STOT SE 3		ACUTE TOXICITY - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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: 2.01

SECTION 16: Other information

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	i coatings -	Industrial use	
Sector of Use	: Industrial use		
Process Category	: PROC05 PROC	07 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		
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 -		oatings - 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.
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 per day.
	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. Avoid carrying out activities involving exposure for more than 4 hours per day.

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. Conditional information : External recovery and recycling of waste should comply with applicable local and/or national regulations.

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

REACH #: 01-2119488216-32