

# Penguard Enamel Alu Comp A

# Section 1. Identification of the substance/mixture and of the company/undertaking

GHS product identifier	: Penguard Enamel Alu Comp A
Product code	: 47962
Other means of identification	: Not available.
Product description	: Paint.
Product type	: Liquid.

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

Use in coatings - Industrial use

Manufacturing country	: Jotun (Cambodia) Limited Oval Office Tower – 18th floor, Street 360 (corner Norodom Boulevard), Sangkat Boeung Keng Kang I Khan Chamkarmon, Phnom Penh, Cambodia.
	Office: +855 78 755 755 SDSJotun@jotun.com
Emergency telephone number	: +47 33 45 70 00 Jotun Norway (head office)

## Section 2. Hazards identification

Classification of the substance or mixture	<ul> <li>FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3</li> </ul>
GHS label elements	
Hazard pictograms	
Signal word	: Warning.
Hazard statements	<ul> <li>H226 - Flammable liquid and vapour. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H373 - May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS)) H412 - Harmful to aquatic life with long lasting effects.</li> </ul>

## Section 2. Hazards identification

Precautionary statements	
Prevention	<ul> <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>P273 - Avoid release to the environment.</li> <li>P260 - Do not breathe vapour or spray.</li> </ul>
Response	<ul> <li>P314 - Get medical advice/attention if you feel unwell.</li> <li>P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.</li> <li>P362 - Take off contaminated clothing and wash before reuse.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P302 + P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.</li> <li>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.</li> <li>Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337 + P313 - If eye irritation persists: Get medical advice or attention.</li> </ul>
Storage	<ul> <li>P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.</li> <li>P403 + P235 - Keep cool.</li> </ul>
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not : None known. result in classification

## Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Ingredient name	%	CAS number
epoxy resin (MW 700-1200)	≥25 - ≤50	25036-25-3
xylene	≥10 - <22	1330-20-7
hydrocarbons, C9, aromatics	≤9.3	64742-95-6
1-methoxy-2-propanol	≤8.8	107-98-2
ethylbenzene	<10	100-41-4
hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	≤1.8	64742-82-1
maleic anhydride	≤0.1	108-31-6

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 and hence require reporting in this section.

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

## Section 4. First aid measures

<u>Description of necessary first aid measures</u>			
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.		
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.		

# Section 4. First aid measures

Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important s	<u>ymptoms/effects,</u>	acute and	delayed
-			

Potential acute health effec			
Eye contact	Causes serious eye irritation.		
Inhalation	May cause respiratory irritation.		
Skin contact	Causes skin irritation. May cause an allergic skin reaction.		
Ingestion	No known significant effects or critical hazards.		
Over-exposure signs/symp			
Eye contact	Adverse symptoms may include the following: pain or irritation vatering edness		
Inhalation	Adverse symptoms may include the following: espiratory tract irritation coughing		
Skin contact	Adverse symptoms may include the following: rritation edness		
Ingestion	lo specific data.		
Indication of immediate medical attention and special treatment needed, if necessary			
Notes to physician	Γreat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	<del>;</del>	
Specific treatments	No specific treatment.		
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. s suspected that fumes are still present, the rescuer should wear an appropriat nask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothin horoughly with water before removing it, or wear gloves.	te n	

See toxicological information (Section 11)

## Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

## Section 5. Firefighting measures

Specific hazards arising from the chemical	: Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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# Section 6. Accidental release measures

Personal precautions, protect	ive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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".
Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and material for con	tainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

### Control parameters

#### **Occupational exposure limits**

Ingredient name	Exposure limits		
xylene	Ministry of Labor (Thailand, 8/2017). [xylene (o-, m-, p- isomers)]		
1-methoxy-2-propanol	TWA: 100 ppm 8 hours. ACGIH TLV (United States, 1/2023).		
	STEL: 369 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 184 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.		
ethylbenzene	Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.		
maleic anhydride	ACGIH TLV (United States, 1/2023). Skin sensitiser. Inhalation sensitiser. TWA: 0.01 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction and vapor		

Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# Section 8. Exposure controls/personal protection

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Individual protection meas	
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
	<ul> <li>There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.</li> <li>The breakthrough time must be greater than the end use time of the product.</li> <li>The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.</li> <li>Gloves should be replaced regularly and if there is any sign of damage to the glove material.</li> <li>Always ensure that gloves are free from defects and that they are stored and used correctly.</li> </ul>
	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 ISO 374-1:2016. May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm) Not recommended, gloves(breakthrough time) < 1 hour: butyl rubber (> 0.4 mm), PVC (> 0.5 mm) Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07
	mm), Teflon (> 0.35 mm), nitrile rubber (> 0.75 mm), polyvinyl alcohol (PVA) (> 0.3 mm)
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	<ul> <li>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.</li> </ul>
Respiratory protection	<ul> <li>Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.</li> <li>If workers are exposed to concentrations above the exposure limit, they must use a</li> </ul>
	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.

# Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>		
Physical state	1	Liquid.
Colour	4	Various colours.
Odour	1	Characteristic.
Odour threshold	1	Not available.
рН	1	Not available.
Melting point/freezing point	1	Not applicable.
Boiling point, initial boiling point, and boiling range	:	Lowest known value: 120.17°C (248.3°F) (1-methoxy-2-propanol). Weighted average: 142.49°C (288.5°F)
Flash point	:	Closed cup: 25°C (77°F)
Evaporation rate	1	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.76compared with butyl acetate
Flammability	1	Not applicable.
Lower and upper explosion limit/flammability limit	:	0.8 - 13.74%
Vapour pressure	-	Highest known value: 2.7 kPa (20.3 mm Hg) (at 20°C) (hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)). Weighted average: 0.93 kPa (6.98 mm Hg) (at 20°C)
Relative vapour density	:	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.53 (Air = 1)
Relative density	:	1.152 g/cm <sup>3</sup>
Solubility	1	cold water0hot water0
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).
Decomposition temperature	1	Not available.
Viscosity	1	Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)
Flow time (ISO 2431)	:	Not available.
Particle characteristics		
Median particle size	:	Not applicable.

# Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# Section 11. Toxicological information

#### Information on toxicological effects

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	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
maleic anhydride	LD50 Oral	Rat	400 mg/kg	-

#### Irritation/Corrosion

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

#### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW 700-1200)	skin	Mammal - species unspecified	Sensitising
maleic anhydride	skin	Mammal - species unspecified	Sensitising

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

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

Category	Route of exposure	Target organs
Category 3	-	Respiratory tract irritation
Category 3	-	Respiratory tract irritation
Category 3		Narcotic effects
Category 3	-	Narcotic effects
Category 3	-	Narcotic effects
	Category 3 Category 3 Category 3 Category 3 Category 3	exposure       Category 3       Category 3       Category 3       Category 3       Category 3       -

# Section 11. Toxicological information

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

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Category 2 Category 1	-	hearing organs central nervous system (CNS)
maleic anhydride	Category 1 Category 2	inhalation	respiratory system

#### **Aspiration hazard**

Product/ingredient name	Result
xylene hydrocarbons, C9, aromatics ethylbenzene hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

# Information on likely routes : Not available. of exposure

#### Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

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.

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure			
Potential immediate effects	:	Not available.	
Potential delayed effects	:	Not available.	
Long term exposure			
Potential immediate effects	:	Not available.	
Potential delayed effects	:	Not available.	
Potential chronic health effe	ect	<u>5</u>	
Not available.			
General	:	May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to v low levels.	very
Carcinogenicity	1	No known significant effects or critical hazards.	
Date of issue/Date of revision		: 19.12.2023	9/13

## Section 11. Toxicological information

#### Mutagenicity

- : No known significant effects or critical hazards.
- **Reproductive toxicity**
- : No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Penguard Enamel Alu Comp A (MM-WCS)	N/A	7166.5	N/A	94.7	N/A
xylene	N/A	1100	N/A	20	N/A
1-methoxy-2-propanol	6600	13000	N/A	N/A	N/A
ethylbenzene	N/A	N/A	N/A	17.8	N/A
maleic anhydride	400	N/A	N/A	N/A	N/A

# Section 12. Ecological information

<u>Toxicity</u>			
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
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
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
-	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	Acute EC50 <10 mg/l	Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
maleic anhydride	Acute LC50 230 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene hydrocarbons, C9, aromatics ethylbenzene hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)			Readily Not readily Readily Not readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential	
xylene	3.12	8.1 to 25.9	low	
hydrocarbons, C9, aromatics	-	10 to 2500	high	
1-methoxy-2-propanol	<1	-	low	
ethylbenzene	3.6	-	low	
hydrocarbons, C9-C12, n-	-	10 to 2500	high	
alkanes, isoalkanes, cyclics,				
aromatics (2-25%)				
maleic anhydride	-2.78	-	low	

: 19.12.2023

## Section 12. Ecological information

#### Mobility in soil

Soil/water partition	: Not available.
coefficient (Koc)	

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

# Section 13. Disposal considerations

Disposal methods	: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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.

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	Paint	Paint	Paint
Transport hazard class(es)	3	3	3
Packing group		111	
Environmental	No.	No.	No.

	<u>Tunnel code</u> (D/E)
UN	:
IMDG	· Emorgoney schodulos E E S E

- IMDG : <u>Emergency schedules</u> F-E, <u>S-E</u>
- 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.

Transport in bulk according : Not available. to IMO instruments

## Section 15. Regulatory information

Harmful Chemicals List : Listed

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Section 16. Other information

<u>History</u>	
Date of printing	: 19.12.2023
Date of issue/Date of revision	: 19.12.2023
Date of previous issue	: 15.12.2023
Version	: 1.01
Key to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations</li> </ul>

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

References : Not available.

#### ✓ Indicates information that has changed from previously issued version.

#### 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

## Section 16. Other information

needs and specific application practices.

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