SAFETY DATA SHEET

Penguard Universal Comp B

Section 1. Identification of the hazardous chemical and of the supplier

School, Baridhara, Dhaka-1216

Telephone +880 2 9856886 Fax +880 2 9852732

SDSJotun@jotun.com

Bangladesh

Product identifier	: Penguard Universal Comp B
Other means of identification	: Not available.
Product code	: 27801
Product description	: Hardener.
Product type	: Liquid.
Relevant identified uses	of the substance or mixture and uses advised against
Identified uses	
Use in coatings - Industria Use in coatings - Professi	
Supplier's details	: Jotun Bangladesh Ltd House No. 6, 7th Floor Road 2B, Block J Near American Emb. GSO/Japanese Emb.

: Jotun Bangladesh Ltd - Telephone +880 2 9856886

Section 2. Hazards identification

Emergency telephone

number

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 3
<u>GHS label elements</u> Hazard pictograms	
Signal word	: Danger.

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Section 2. Hazards identification

Hazard statements	: H226 - Flammable liquid and vapour.
	H315 - Causes skin irritation.
	H318 - Causes serious eye damage.
	H335 - May cause respiratory irritation.
	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements	
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	 P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 - Take off contaminated clothing and wash before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. 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. P403 + P235 - Keep cool.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not esult in classification	: None known.

Section 3. Composition and information of the ingredients of the hazardous chemical

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

CAS number/other identifiers

CAS number	: Not applicable.
EC number	: Mixture.
Product code	: 27801

Ingredient name	%	CAS number
xylene	≥10 - ≤30	1330-20-7
ethylbenzene	<10	100-41-4
butan-1-ol	≤10	71-36-3
ethylenediamine	<1	107-15-3

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

Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Section 4. First aid measures

Inhalation	: Get medical attention immediately. Call a poison center or physician. 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. 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. 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.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of 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. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Chemical burns must be treated promptly by a physician. 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 symptoms/effects, acute and delayed

Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: May cause respiratory irritation.
Skin contact	: Causes skin irritation.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/sym	<u>otoms</u>
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
Indication of immediate me	dical attention and special treatment needed, if necessary
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.
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
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Section 4. First aid measures

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.

See toxicological information (Section 11)

Section 5. Firefighting measures	
Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
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 nitrogen 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.

Section 6. Accidental release measures

Personal precautions, protective 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. Do not breathe 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 cont	tai	nment 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.

Section 6. Accidental release measures

: 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 spilt 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). 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	DOSH USECHH (Malaysia, 4/2000).
	TWA: 434 mg/m ³ 8 hours.
	TWA: 100 bpj 8 hours.
Ethyl benzene	DOSH USECHH (Malaysia, 4/2000).
	TWA: 100 bpj 8 hours.
	TWA: 434 mg/m ³ 8 hours.
n-Butanol	DOSH USECHH (Malaysia, 4/2000).
	Absorbed through skin.
	CEIL: 152 mg/m ³
	CEIL: 50 bpj
Ethylenediamine	DOSH USECHH (Malaysia, 4/2000).
,	Absorbed through skin.
	TWA: 25 mg/m ³ 8 hours.
	TWA: 10 bpj 8 hours.

Section 8. Exposure controls/personal protection

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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
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.
	applied once exposure has occurred. Wear suitable gloves tested to EN374. May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, Viton®, Barricade, CPF 3, Responder Not recommended, gloves(breakthrough time) < 1 hour: butyl rubber, PVC, PE Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, nitrile rubber, polyvinyl alcohol (PVA)
	 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
	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,
	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.
Skin protection Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should
Eye/face protection	: Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Individual protection meas	ures
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.
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.

Section 8. Exposure controls/personal protection

Respiratory protection	 approved by a specialist before handling this product. 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.
	of folier of brush, consider use of charcoaniter.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Colour	:	Colourless.
Odour	:	Characteristic.
Odour threshold	:	Not applicable.
рН	:	Not applicable.
Melting point	:	Not applicable.
Boiling point	:	>100°C (>212°F)
Flash point	:	Closed cup: 28°C (82.4°F)
Evaporation rate	1	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.72compared with butyl acetate
Flammability (solid, gas)	:	Not applicable.
Lower and upper explosive (flammable) limits	1	0.8 - 11.3%
Vapour pressure	:	Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.96 kPa (7.2 mm Hg) (at 20°C)
Vapour density	:	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.5 (Air = 1)
Relative density	:	0.96 g/cm³
Solubility	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Lowest known value: 355°C (671°F) (butan-1-ol).
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic (40°C): >0.205 cm²/s (>20.5 mm²/s)

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	: Reactive or incompatible with the following materials: oxidising materials
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

Result	Species	Dose	Exposure
LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
LD50 Oral	Rat	4300 mg/kg	-
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	-
LD50 Oral	Rat	790 mg/kg	-
LC50 Inhalation Vapour	Rat	7 mg/l	4 hours
LD50 Dermal	Rabbit	730 uL/kg	-
LD50 Oral	Rat	1200 mg/kg	-
	LC50 Inhalation Vapour LD50 Oral TDLo Dermal LC50 Inhalation Vapour LD50 Dermal LD50 Oral LD50 Oral LC50 Inhalation Vapour LD50 Dermal	LC50 Inhalation VapourRatLD50 OralRatTDLo DermalRabbitLC50 Inhalation VapourRat - MaleLD50 DermalRabbitLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 OralRatLD50 DermalRatLD50 DermalRatLD50 DermalRatLD50 DermalRat	LC50 Inhalation VapourRat20 mg/lLD50 OralRat4300 mg/kgTDLo DermalRabbit4300 mg/kgLC50 Inhalation VapourRat - Male17.8 mg/lLD50 DermalRabbit>5000 mg/kgLD50 OralRat3500 mg/kgLD50 OralRat790 mg/kgLC50 Inhalation VapourRat730 uL/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
5	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
Ethylenediamine	Eyes - Severe irritant	Rabbit	-	24 hours 750 ug	-
	Eyes - Severe irritant	Rabbit	-	750 ug	-
	Skin - Moderate irritant	Rabbit	-	450 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 10 mg	-

Sensitisation

•••••••••••••••••••••••••••••••••••••••	Route of exposure	Species	Result
Ethylenediamine	skin	Mammal - species unspecified	Sensitising

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	• •	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
n-Butanol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name		Route of exposure	Target organs
Ethyl benzene	Category 2	-	hearing organs

Section 11. Toxicological information

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	:	Not available.
Potential acute health effects	5	
Eye contact	:	Causes serious eye damage.
Inhalation	:	May cause respiratory irritation.
Skin contact	:	Causes skin irritation.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	sic	al, chemical and toxicological characteristics
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	4	Adverse symptoms may include the following:
		stomach pains
Delayed and immediate effect	ts	as well as chronic effects from short and long-term exposure
	<u>ts</u>	as well as chronic effects from short and long-term exposure
Short term exposure		
		as well as chronic effects from short and long-term exposure Not available.
Short term exposure Potential immediate	:	
Short term exposure Potential immediate effects	:	Not available.
Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate	:	Not available.
Short term exposure Potential immediate effects Potential delayed effects Long term exposure Potential immediate effects	: :	Not available. Not available. Not available.
Short term exposurePotential immediateeffectsPotential delayed effectsLong term exposurePotential immediateeffectsPotential delayed effects	: : :	Not available. Not available. Not available. Not available.
Short term exposurePotential immediateeffectsPotential delayed effectsLong term exposurePotential immediateeffectsPotential delayed effectsPotential delayed effectsPotential chronic health effects	: : :	Not available. Not available. Not available. Not available.
Short term exposurePotential immediateeffectsPotential delayed effectsLong term exposurePotential immediateeffectsPotential delayed effects	: : :	Not available. Not available. Not available. Not available.
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Short term exposurePotential immediateeffectsPotential delayed effectsLong term exposurePotential immediateeffectsPotential delayed effectsPotential chronic health effectsNot available.GeneralCarcinogenicity	: : : ect	Not available. Not available. Not available. Not available. No known significant effects or critical hazards. No known significant effects or critical hazards.
Short term exposurePotential immediateeffectsPotential delayed effectsLong term exposurePotential immediateeffectsPotential delayed effectsPotential delayed effectsPotential chronic health effectsNot available.GeneralCarcinogenicityMutagenicity	: : : ect	Not available. Not available. Not available. Not available. Not available. S No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Short term exposurePotential immediateeffectsPotential delayed effectsLong term exposurePotential immediateeffectsPotential delayed effectsPotential chronic health effectsNot available.GeneralCarcinogenicityMutagenicityTeratogenicity	: : : ect	Not available. Not available. Not available. Not available. Not available. No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity Acute toxicity estimates

Penguard Universal Comp B			
Section 11. Toxicological information			
Route ATE value			
Oral7291.29 mg/kgDermal4701.98 mg/kgInhalation (vapours)62.2 mg/l			

Section 12. Ecological information

Toxicity

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
Ethyl benzene	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
Ethylenediamine	Acute EC50 100000 µg/l Fresh water	Algae - Chlorella pyrenoidosa	96 hours
,	Acute LC50 115.7 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 160 µg/l Fresh water	Daphnia - Daphnia magna	21 days

Persistence and degradability

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

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
Ethyl benzene	3.6	-	low
n-Butanol	1	-	low
Ethylenediamine	-7.02	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal information

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 nonrecyclable 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

Section 13. Disposal information

soil, waterways, drains and sewers.

Section 14. Transport information

	UN	ADR/RID	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	Paint	Paint	Paint	Paint
Transport hazard class(es)	3	3	3	3
Packing group	111	111	111	
Environmental hazards	No.	No.	No.	No.
Additional information	-	Hazard identification number 30 Tunnel code (D/E)	Emergency schedules 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

Malaysia Inventory (EHS : Not determined Register)

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.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

Section 16. Other information

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Date of previous issue	: 08.09.2021
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Section 16. Other information

Kow to obbroviations	ATE - Aguta Taviaity Estimata
Key to abbreviations	: ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = 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)
	UN = United Nations
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Procedure used to derive the classification

Classification	Justification
Not supported	On basis of test data
Not supported	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 needs and specific application practices.

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