



#### Jota-Etch

Section 1. Identi	fication
GHS product identifier	: Jota-Etch
Product code	: 24400
Other means of identification	: Not available.
Product type	: Liquid.
Product description	: Paint.
Relevant identified uses o	f the substance or mixture and uses advised against
Use in coatings - Industria Use in coatings - Profess	
Supplier's details	: 佐敦涂料(张家港)有限公司 江苏省张家港保税区扬子江化学工业园长江路15号 215634 电话: +86 512 58937988 传真: +86 512 58937986
	Jotun Coatings (Zhangjiagang) Co. Ltd No.15 Changjiang Road Jiangsu Yangtze River International Chemical Industry Park, Zhangjiagang Free Trade Zone, Jiangsu Province 215634 Tel: +86 512 58937988 Fax: +86 512 58937986
	Jotun Paints (Malaysia) Sdn Bhd, Lot 7 Persiaran Perusahaan, Section 23 40300 SHAH ALAM, Selangor Darul Ehsan Malaysia Tel: +603 51235500 Fax: +603 51235599
	SDSJotun@jotun.com
Emergency telephone number (with hours of operation)	: Jotun Coatings (Taiwan) Ltd. Co. Tel: +886 2 87705061
Section 2. Hazar	ds identification
Classification of the	: FLAMMABLE LIQUIDS - Category 2

Classification of the	: FLAMMABLE LIQUIDS - Category 2
substance or mixture	ACUTE TOXICITY (oral) - Category 5
	SKIN CORROSION/IRRITATION - Category 2
	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
	SKIN SENSITISATION - Category 1
	REPRODUCTIVE TOXICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract
	irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) -
	Category 3
	AQUATIC TOXICITY (ACUTE) - Category 2
	AQUATIC TOXICITY (CHRONIC) - Category 2

#### **GHS label elements**

# Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger.
Hazard statements	<ul> <li>H225 - Highly flammable liquid and vapour. H303 - May be harmful if swallowed. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H361 - Suspected of damaging fertility or the unborn child. H411 - Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
Prevention	<ul> <li>P201 - Obtain special instructions before use.</li> <li>P280 - Wear protective gloves, protective clothing and eye or face protection.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>P241 - Use explosion-proof electrical, ventilating or lighting equipment.</li> <li>P242 - Use non-sparking tools.</li> <li>P243 - Take action to prevent static discharges.</li> <li>P273 - Avoid release to the environment.</li> <li>P261 - Avoid breathing vapour.</li> </ul>
Response	<ul> <li>P391 - Collect spillage.</li> <li>P308 + P313 - IF exposed or concerned: Get medical advice or attention.</li> <li>P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwel</li> <li>P362 + P364 - Take off contaminated clothing and wash it 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, P310 - IF IN EYES: Rinse cautiously with water for severa minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>Immediately call a POISON CENTER or doctor.</li> </ul>
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	: None known.

result in classification

### Section 3. Composition/information on ingredients

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

Product name	% (w/w)	CAS number	Туре
propan-2-ol	≥10 - ≤25	67-63-0	[1] [2]
butan-1-ol	≥10 - <25	71-36-3	[1] [2]
butanone	≥10 - ≤25	78-93-3	[1] [2]
Toluene	<10	108-88-3	[1] [2]
xylene	≤10	1330-20-7	[1] [2]
epoxy resin (MW 700-1200)	≤10	25036-25-3	[1]
Date of issue/Date of revision : 14.08.2023	Date of previous issue	: 18.07.2023 Version : 1.0	2 2/16

Jota-Etch				
Section 3. Composition/ir	Section 3. Composition/information on ingredients			
1-methoxy-2-propanol	≤5	107-98-2	[1] [2]	
trizinc bis(orthophosphate)	≤5	7779-90-0	[1]	
ethylbenzene	≤3	100-41-4	[1] [2]	
产品名称	% (w/w)	CAS号码	类型	
2-丙醇	≥10 - ≤25	67-63-0	[1] [2]	
1-丁醇	≥10 - <25	71-36-3	[1] [2]	
丁酮	≥10 - ≤25	78-93-3	[1] [2]	
甲苯	<10	108-88-3	[1] [2]	
二甲苯	≤10	1330-20-7	[1] [2]	
环氧树脂 (MW700 - 1200)	≤10	25036-25-3	[1]	
1-甲氧基-2-丙醇	≪5	107-98-2	[1] [2]	
磷酸: 锌盐 (2:3)	$\leqslant 5$	7779-90-0	[1]	
乙苯	≤3	100-41-4	[1] [2]	

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.

#### **Type**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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.
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.
Skin contact	: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

### Section 4. First aid measures

Section 4. First a	Section 4. First aid measures			
Ingestion	: Get medical attention immediately. Call a poison center or physician. 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. 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/				
Potential acute health effe				
Eye contact	: Causes serious eye damage.			
Inhalation	: May cause drowsiness or dizziness. May cause respiratory irritation.			
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.			
Ingestion	: May be harmful if swallowed.			
Over-exposure signs/sym				
Eye contact	: Adverse symptoms may include the following: pain watering redness			
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations			
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations			
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations			
Indication of immediate me	dical attention and special treatment needed, if necessary			
Notes to physician	<ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</li> </ul>			
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 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 <sub>2</sub> , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: Highly 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 toxic 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 phosphorus 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	<ul> <li>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</li> </ul>

### Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	:	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.
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. Collect spillage.
Methods and material for cor	ntai	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.

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 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	g	
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. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. 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
propan-2-ol			TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 500 ppm 15 minutes. STEL: 1228.75 mg/m <sup>3</sup> 15 minutes. TWA: 400 ppm 8 hours. TWA: 983 mg/m <sup>3</sup> 8 hours.
butan-1-ol			TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 378.75 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 303 mg/m <sup>3</sup> 8 hours. TWA: 100 ppm 8 hours.
butanone			TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 737.5 mg/m <sup>3</sup> 15 minutes. STEL: 250 ppm 15 minutes. TWA: 590 mg/m <sup>3</sup> 8 hours. TWA: 200 ppm 8 hours.
Toluene			TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). Absorbed
Date of issue/Date of revision	: 14.08.2023	Date of previous issue	:18.07.2023 Version :1.02 6/16

# Section 8. Exposure controls/personal protection

through skin.STEL: 125 ppm 15 minutes.STEL: 470 mg/m³ 15 minutes.TWA: 100 ppm 8 hours.TWA: 376 mg/m³ 8 hours.TW Minstry of Labor, labor permissibleworkplace exposure standards, allowableconcentration (Taiwan, 3/2018).STEL: 125 ppm 15 minutes.STEL: 125 ppm 15 minutes.TWA: 434 mg/m³ 8 hours.TWA: 434 mg/m³ 8 hours.TWA: 100 ppm 8 hours.TMA: 100 ppm 8 hour
STEL: 470 mg/m³ 15 minutes. TWA: 100 ppm 8 hours. TWA: 376 mg/m³ 8 hours.xyleneTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 542.5 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 434 mg/m³ 8 hours.1-methoxy-2-propanolTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
TWA: 100 ppm 8 hours. TWA: 376 mg/m³ 8 hours.xyleneTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 542.5 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours.1-methoxy-2-propanolTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
xyleneTWA: 376 mg/m³ 8 hours.xyleneTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 542.5 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours.1-methoxy-2-propanolTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
xyleneTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 542.5 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours.1-methoxy-2-propanolTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
workplace exposure standards, allowable concentration (Taiwan, 3/2018). STEL: 542.5 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours.1-methoxy-2-propanolTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
concentration (Taiwan, 3/2018).STEL: 542.5 mg/m³ 15 minutes.STEL: 125 ppm 15 minutes.TWA: 434 mg/m³ 8 hours.TWA: 100 ppm 8 hours.TWA: 100 ppm 8 hours.TW Minstry of Labor, labor permissibleworkplace exposure standards, allowableconcentration (Taiwan, 3/2018).
STEL: 542.5 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 434 mg/m³ 8 hours. TWA: 100 ppm 8 hours.1-methoxy-2-propanolTW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
STEL: 125 ppm 15 minutes.         TWA: 434 mg/m³ 8 hours.         TWA: 100 ppm 8 hours.
TWA: 434 mg/m³ 8 hours.         TWA: 100 ppm 8 hours.         TWA: 100 ppm 8 hours.         TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
1-methoxy-2-propanol       TWA: 100 ppm 8 hours.         1-methoxy-2-propanol       TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
1-methoxy-2-propanol       TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 3/2018).
workplace exposure standards, allowable concentration (Taiwan, 3/2018).
concentration (Taiwan, 3/2018).
STEL: 461.25 mg/m <sup>3</sup> 15 minutes.
STEL: 125 ppm 15 minutes.
TWA: 369 mg/m <sup>3</sup> 8 hours.
TWA: 100 ppm 8 hours.
ethylbenzene TW Minstry of Labor, labor permissible
workplace exposure standards, allowable
concentration (Taiwan, 3/2018).
STEL: 125 ppm 15 minutes.
STEL: 542.5 mg/m <sup>3</sup> 15 minutes.
TWA: 100 ppm 8 hours.
TWA: 434 mg/m <sup>3</sup> 8 hours.

#### **Biological exposure indices**

No exposure indices known.

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.
Individual protection measure	<u>s</u>
Respiratory protection	: 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.
Hand protection	<ul> <li>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 ISO 374-1:2016. May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (&gt; 0.35 mm), butyl rubber (&gt; 0.4 mm), PVC (&gt; 0.5 mm), polyvinyl alcohol (PVA) (&gt; 0.3 mm) Recommended, gloves(breakthrough time) &gt; 8 hours: Viton® (&gt; 0.7 mm), fluor rubber (&gt; 0.35 mm), 4H/Silver Shield® (&gt; 0.07 mm), Teflon (&gt; 0.35 mm), nitrile rubber (&gt; 0.4 mm)</li> </ul>

### Section 8. Exposure controls/personal protection

•	· ·
	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.
Eye 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
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	: 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.
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.

# 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	: Liquid.
Colour	: Various
Odour	: Characteristic.
Odour threshold	: Not available.
рН	: Not applicable.
Melting point/freezing point	: Not applicable.
Boiling point, initial boiling point, and boiling range	: Not available.
Flash point	: Closed cup: -5°C (23°F)
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: 0.8 - 13.74%

2

#### Vapour pressure

	V	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
butanone	78.76	10.5					
propan-2-ol	33	4.4					
Toluene	23.17	3.1					
water	17.5	2.3					
n-butyl acetate	11.25	1.5	DIN EN 13016-2				
ethylbenzene	9.3	1.2					
ate of issue/Date of revision	: 14.08	.2023 Date	e of previous issue	: 18.07.2023		Version : 1.02	

### Section 9. Physical and chemical properties and safety characteristics

1-methoxy-2-propanol	8.5	1.1				
butan-1-ol	<7.5	<1	DIN EN 13016-2			
xylene	6.7	0.89				
2-methoxy-1-methylethyl acetate	2.7	0.36	OECD 104			
phosphoric acid	0.03	0.004				
talc (non-asbestos form)	0	0				
1H-imidazole-1-propylamine	0	0		0.02	0.0027	
Relative vapour density	: Not avail	able.	•			
Density	: 0.969 to	0.97 g/cm³				

#### Solubility(ies)

	Media	Result
		Not soluble Not soluble
Pa	artition coefficient: n- : Not	applicable.

#### octanol/water

•	•••	۰.	Ч	М		

ŝ

#### **Auto-ignition temperature**

uto-ignition temperature :							
Ingredient name	°C	°F	Method				
1-methoxy-2-propanol	270	518					
2-methoxy-1-methylethyl acetate	333	631.4	DIN 51794				
butan-1-ol	355	671	EU A.15				
1H-imidazole-1-propylamine	400	752					
butanone	404	759.2					
n-butyl acetate	415	779	EU A.15				
xylene	432	809.6					
ethylbenzene	432.22	810					
propan-2-ol	456	852.8					
Toluene	480	896					

#### **Decomposition temperature** Viscosity

: Not available.

: Kinematic (40°C (104°F)): >20.5 mm<sup>2</sup>/s (>20.5 cSt)

#### **Particle characteristics** Median particle size

: Not applicable.

# Section 10. Stability and reactivity

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.								
Date of issue/Date of revision	: 14.08.2023 Date of previous issue : 18.07.2023 Version : 1.02 9/16								

## Section 11. Toxicological information

#### Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-
butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
Toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	-
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	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
propan-2-ol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
butanone	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 14 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-
Toluene	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
xylene	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rat	-	87 milligrams 8 hours 60 microliters	-
epoxy resin (MW 700-1200)	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

#### **Sensitisation**

••••••	Route of exposure	Species	Result
epoxy resin (MW 700-1200)	skin	Mammal - species unspecified	Sensitising

#### **Mutagenicity**

Not available.

#### **Carcinogenicity**

Not available.

#### Reproductive toxicity

Not available.

### Section 11. Toxicological information

#### **Teratogenicity**

Not available.

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

Product/ingredient name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	-	Narcotic effects
butan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
butanone	Category 3	-	Narcotic effects
Toluene	Category 3	-	Narcotic effects
xylene	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects

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

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

#### Aspiration hazard

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

#### Information on likely routes : Not available.

#### of exposure

Potential acute health effects

Folential acule nearlin enects	
Eye contact	: Causes serious eye damage.
Inhalation	: May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: May be harmful if swallowed.

#### Symptoms related to the physical, 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 nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

# Section 11. Toxicological information

Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

Delayed and immediate effect	ts	as well as chronic effects from short and long-term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	1	Not available.
Potential delayed effects	1	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
General	;	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	Suspected of damaging fertility or the unborn child.

#### 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)
Jota-Etch	3143.0	16449.9	N/A	217.6	N/A
propan-2-ol	N/A	12800	N/A	N/A	N/A
butan-1-ol	500	N/A	N/A	N/A	N/A
butanone	N/A	6480	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	49	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

### Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
butanone	Acute EC50 500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute LC50 530 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
trizinc bis(orthophosphate)	Acute LC50 0.14 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.1 mg/l	Micro-organism	4 hours
ethylbenzene	Acute EC50 7700 µg/ľ 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

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-		Readily
trizinc bis(orthophosphate)	-	-	Not readily
ethylbenzene	-	-	Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
propan-2-ol	0.05	-	low
butan-1-ol	1	-	low
butanone	0.3	-	low
Toluene	2.73	90	low
xylene	3.12	8.1 to 25.9	low
1-methoxy-2-propanol	<1	-	low
trizinc bis(orthophosphate)	-	60960	high
ethylbenzene	3.6	-	low

#### **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. з. 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.

# to IMO instruments

# Section 15. Regulatory information

#### **TCCSCA List of toxic chemicals**

Not applicable.

#### **TCCSCA List of concerned chemicals**

Not applicable.

OSHA Enforcement Rules Article 28	: This product contains substances "Specially hazardous to health": propan-2-ol, butan-1-ol, butanone, Toluene, xylene, n-butyl acetate, lead.
OSHA Article 29	: Employers shall not employ persons under the age of 18 to perform any potentially dangerous or harmful work involving this product. (OSHA Art. 29 par 3)
OSHA Article 30	: Employers shall not employ female laborers who are still within their first postpartum year to perform potentially dangerous and hazardous work involving this product. (OSHA Art. 30 second part, par 2)
Organic solvent poisoning prevention rule	: Type 2
Priority management chemic	als, Article 2
CMR chemical substances,	category 1 (Article 2.2 (I)) : Applicable
Chemical substances poss	essing physical hazards or health hazards (Article 2.2 (II))

### Section 14. Transport information

Jota-Etch

	UN	IMDG	IATA	
UN number	UN1263	UN1263	UN1263	
UN proper shipping name	Paint	Paint. Marine pollutant (trizinc bis(orthophosphate))	Paint	
Transport hazard class(es)	3		3	
Packing group	Ш	II	II	
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.	
Additional information	tion			
ADR/RID	: Tunnel restriction Hazard identificat			
IMDG		The marine pollutant mark is not required when transported in sizes of $\leq 5 \text{ L}$ or $\leq 5 \text{ kg}$ . <b>Emergency schedules</b> F-E, <u>S-E</u>		
ΙΑΤΑ		: The environmentally hazardous substance mark may appear if required by other transportation regulations.		
Special precautions	upright and secur	a <b>user's premises:</b> always transpo e. Ensure that persons transportin ccident or spillage.		
Transport in bulk a	ccording : Not available.			

### Section 15. Regulatory information

Ingredient name	Name on list	Concentration
butanone xylene 1-methoxy-2-propanol	isopropyl alcohol methyl ethyl ketone xylenes propylene glycol monomethyl ether propylene glycol monomethyl ether acetate butyl acetate	≥10 - ≤25 ≥10 - ≤25 ≤10 ≤5 ≤0.1 ≤0.1

#### **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.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

### Section 16. Other information

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 5	Calculation method
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	Calculation method
SKIN SENSITISATION - Category 1	Calculation method
REPRODUCTIVE TOXICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3	Calculation method
AQUATIC TOXICITY (ACUTE) - Category 2	Calculation method
AQUATIC TOXICITY (CHRONIC) - Category 2	Calculation method
References     : Not available.	

Organisation that prepared	12	Jotun AS, Norway
the SDS		+47 33 45 70 00

<u>History</u>	
Date of printing	: 14.08.2023
Date of previous issue	: 18.07.2023
Version	: 1.02
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>

✓ Indicates information that has changed from previously issued version. Notice to reader

### 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.