SAFETY DATA SHEET



Jotun Thinner No. 23

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

1.1 Product identifier	
Product name	: Jotun Thinner No. 23
Product code	: 555
Product description	: Solvent.
Product type	: Liquid.
Other means of identification	: Not available.

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

Use in coatings - Industrial use Use in coatings - Professional use

1.3 Details of the supplier of the safety data sheet

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Jotun A/S P.O.Box 2021 3202 Sandefjord Norway Tel: + 47 33 45 7 Fax: +47 33 45 7 E-mail: SDSJotur	2 42	Jotun Paints (Europe) Ltd. Stather Road Flixborough, Scunthorpe North Lincolnshire DN15 8RR England Tel: +44 17 24 40 00 00
		Fax: +44 17 24 40 01 00
1.4 Emergency te	lephone number	
National advisor	<u>y body/Poison C</u>	entre
Telephone nun	nber : C	ontact NHS Direct; phone 0845 4647 or 111. Open 24/7.
Supplier		
Telephone nun	nber : +4	47 33 45 70 00 Jotun Norway (head office)

SECTION 2: Hazards identification

2.1 Classification of the s	ubstance or mixture	e
Product definition	: Mixture	
Classification according	to UK CLP/GHS	
🏹 am. Liq. 3, H226		
Acute Tox. 4, H312		
Acute Tox. 4, H332		
Skin Irrit. 2, H315		
Eye Dam. 1, H318		
STOT SE 3, H335		
STOT SE 3, H336		
STOT RE 2, H373		
Asp. Tox. 1, H304		
Aquatic Chronic 3, H412		
The product is classified a	as hazardous accordi	ng to UK CLP Regulation SI 2019/720 as amended.
See Section 16 for the ful	I text of the H stateme	ents declared above.
See Section 11 for more of	detailed information o	on health effects and symptoms.

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SECTION 2: Hazards identification

2.2 Label elements		
Hazard pictograms	:	\wedge \wedge \wedge \wedge
Signal word	:	Danger.
Hazard statements	:	 F226 - Flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways. H312 + H332 - Harmful in contact with skin or if inhaled. H315 - Causes skin irritation. H318 - Causes serious eye damage. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. H373 - May cause damage to organs through prolonged or repeated exposure. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements		
General		Not applicable.
Prevention	:	 P280 - Wear protective gloves and protective clothing. Wear eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment. P260 - Do not breathe vapour or spray.
Response	-	 P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P312, P352 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. 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.
Disposal	;	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	en	<u>ts</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures :	Mixture			
Product/ingredient name	Identifiers	%	Classification	Туре
x ylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥10 - ≤22	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≥10 - ≤24	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
cyclohexanone	REACH #: 01-2119453616-35 EC: 203-631-1 CAS: 108-94-1	≤8.4	Flam. Liq. 3, H226 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤10	Flam. Liq. 3, H226 STOT SE 3, H336 See Section 16 for	[1] [2]
			the full text of the H statements declared above.	

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

<u>Type</u>

[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

4.1 Description of 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.		
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. 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. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. 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.		
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.		

4.2 Most important symptoms and effects, both acute and delayed

<u>Over-exposure signs/s</u>	symptoms
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
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains nausea or vomiting
4.3 Indication of any im	mediate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

See toxicological information (Section 11)

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SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media	: Recommended: alcohol-resistant foam, CO ₂ , powders, water spray.
Unsuitable extinguishing media	: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

	-	
Hazards from the substance or mixture	:	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 combustion products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Advice for firefighters		
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

Date of issue/Date of revision

6.1 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".
6.2 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.
6.3 Methods and material for	со	ntainment 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.

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SECTION 6: Accidental release measures

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6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

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

7.1 Precautions for safe handling

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 swallow. 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.

7.2 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.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s)

- Recommendations
- : Not available.
- Industrial sector specific : Not available. solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin.
	STEL: 441 mg/m ³ 15 minutes.
	STEL: 100 ppm 15 minutes.
	TWA: 220 mg/m ³ 8 hours.
	TWA: 50 ppm 8 hours.
butan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 154 mg/m ³ 15 minutes.
	STEL: 50 ppm 15 minutes.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 552 mg/m ³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
	TWA: 441 mg/m ³ 8 hours.
cyclohexanone	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 20 ppm 15 minutes.
	TWA: 10 ppm 8 hours.
	STEL: 82 mg/m ³ 15 minutes.
	TWA: 41 mg/m ³ 8 hours.
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 560 mg/m ³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.

Biological exposure indices

Product/ingredient name	Exposure indices
xylene	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) [Xylene, o-, m-, p- or mixed isomers]
	BGV: 650 mmol/mol creatinine, methyl hippuric acid [in urine]. Sampling time: post shift.
cyclohexanone	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 2 mmol/mol creatinine, cyclohexanol [in urine]. Sampling time: post shift.

Recommended monitoring : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
xylene	DNEL	Long term Oral	5 mg/kg	General	Systemic
			bw/day	population	-
	DNEL	Long term	65.3 mg/m ³		Local
		Inhalation	J J	population	
	DNEL	Long term	65.3 mg/m ³	General	Systemic
		Inhalation	-	population	
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	221 mg/m ³	Workers	Local
	DITE	Inhalation	g,	T on or o	Loodi
	DNEL	Long term	221 mg/m ³	Workers	Systemic
		Inhalation			,
	DNEL	Short term	260 mg/m³	General	Local
te of issue/Date of revision :0	I	Date of previous issue	260 mg/m ³		Local

		Inhalation		population	
	DNEL	Short term	260 mg/m ³	General	Systemic
		Inhalation	Ū	population	
	DNEL	Short term	442 mg/m ³	Workers	Local
		Inhalation	· · = ···;9,····		
	DNEL	Short term	442 mg/m ³	Workers	Systemic
		Inhalation	++2 mg/m		Cysternie
outan-1-ol	DNEL	Long term Oral	1.5625 mg/	General	Systemic
			kg bw/day	population	0,0001110
	DNEL	Long term Dermal	3.125 mg/	General	Systemic
	DINEL	Long term Derma	kg bw/day	population	Oysternie
	DNEL	Long term	55.357 mg/	General	Systemic
	DINEL	Inhalation	m ³		Systemic
	DNEL		155 mg/m ³	population General	Local
	DINEL	Long term	155 mg/m		LUCAI
		Inhalation	210	population	
	DNEL	Long term	310 mg/m ³	Workers	Local
		Inhalation	440 5 -		
ethylbenzene	DMEL	Long term	442 mg/m ³	Workers	Local
		Inhalation			
	DMEL	Short term	884 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Long term Oral	1.6 mg/kg	General	Systemic
		-	bw/day	population	-
	DNEL	Long term	15 mg/m ³	General	Systemic
		Inhalation	J	population	,
	DNEL	Long term	77 mg/m³	Workers	Systemic
		Inhalation	//		Cystoniio
	DNEL	Long term Dermal	180 mg/kg	Workers	Systemic
		Long term Dermal	bw/day	WOINEI3	Cysternic
	DNEL	Short term		Workers	Local
	DINEL		293 mg/m ³	VVUIKEIS	Local
weleboweness.		Inhalation	1	\//orkers	Quetern:-
cyclohexanone	DNEL	Short term Dermal	4 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Short term	80 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Short term	80 mg/m³	Workers	Local
		Inhalation			
	DNEL	Long term Dermal	4 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	40 mg/m ³	Workers	Systemic
		Inhalation	Ĭ		-
	DNEL	Long term	40 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term Dermal	1 mg/kg	General	Systemic
			bw/day	population	Cysternic
			bw/uay		
	DNEL	Short term	20 ma/m3	[Consumers] General	Suctomia
	DINEL		20 mg/m ³		Systemic
		Inhalation		population	
				[Consumers]	
	DNEL	Short term Oral	1.5 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
	DNEL	Short term	40 mg/m³	General	Local
		Inhalation		population	
				[Consumers]	
	DNEL	Long term Dermal	1 mg/kg	General	Systemic
			bw/day	population	,
				[Consumers]	
	DNEL	Long term	10 mg/m ³	General	Systemic
	DINEL	Inhalation	io ing/in	population	Cysternic
	1		1.5 mg/kg	[Consumers]	Quetern:-
				General	Systemic
	DNEL	Long term Oral			- ,
	DNEL	Long term Oral	bw/day	population	,
	DNEL	Long term Oral			

ECTION 8: Exposure	controis/p	ersonal prote	ction		
	DNEL	Long term	20 mg/m ³	General	Local
		Inhalation		population	
				[Consumers]	
	DNEL	Short term Dermal	1 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Dermal	1 mg/kg	General	Systemic
		Ū	bw/day	population	
	DNEL	Short term Oral	1.5 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Oral	1.5 mg/kg	General	Systemic
		Ŭ	bw/day	population	,
	DNEL	Long term	2.55 mg/m ³		Systemic
		Inhalation	Ũ	population	,
	DNEL	Short term Dermal	4 mg/kg	Workers	Systemic
		Lange tawa Dawa al	bw/day	\\/ a vl/ a va	Curatamia
	DNEL	Long term Dermal	4 mg/kg bw/day	Workers	Systemic
	DNEL	Short term	5 mg/m ³	General	Systemic
	5.122	Inhalation	o mg/m	population	eyetenne
	DNEL	Long term	10 mg/m ³	Workers	Local
	5.122	Inhalation	ro mg/m	Tronkoro -	Loodi
	DNEL	Long term	10 mg/m³	Workers	Systemic
	5.122	Inhalation	ro mg/m	Tronkoro -	eyetenne
	DNEL	Short term	20 mg/m ³	Workers	Local
	DINEL	Inhalation	20 mg/m	WORKERS	Local
	DNEL	Short term	20 mg/m ³	Workers	Systemic
	DINLL	Inhalation	20 mg/m	VVOIKEI3	Oysternic
1-methoxy-2-propanol	DNEL	Long term Oral	33 mg/kg	General	Systemic
r-memoxy-z-propanor	DINLL	Long term Oral	bw/day	population	Systemic
	DNEL	Long term	43.9 mg/m ³		Systemic
	DNEL	Inhalation	43.9 mg/m	population	Systemic
	DNEL		78 mg/kg	General	Sustamia
	DNEL	Long term Dermal			Systemic
			bw/day	population	Curatanaia
	DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	369 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term	553.5 mg/	Workers	Local
		Inhalation	m ³		
	DNEL	Short term	553.5 mg/	Workers	Systemic
		Inhalation	m ³		e jeternio

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
butan-1-ol	Fresh water	0.082 mg/l	-
	Marine	0.0082 mg/l	-
	Sewage Treatment Plant	2476 mg/l	-
	Fresh water sediment	0.178 mg/kg dwt	-
	Marine water sediment	0.0178 mg/kg dwt	-
	Soil	0.015 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
-	Marine	0.01 mg/l	-
	Sewage Treatment Plant	9.6 mg/l	-
	Fresh water sediment	13.7 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
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	Secondary Poisoning	20 mg/kg	-
cyclohexanone	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0.512 mg/kg dwt	-
	Marine water sediment	0.0512 mg/kg dwt	-
	Soil	0.0435 mg/kg dwt	-
1-methoxy-2-propanol	Fresh water	10 mg/l	-
	Marine	1 mg/l	-
	Sewage Treatment	100 mg/l	-
	Plant		
	Fresh water sediment	52.3 mg/kg dwt	-
	Marine water sediment	5.2 mg/kg dwt	-
	Soil	5.49 mg/kg dwt	-

8.2 Exposure controls	
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 measures Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

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.

Gloves

Wear suitable gloves tested to ISO 374-1:2016.

Recommended, gloves(breakthrough time) > 8 hours: Teflon (> 0.35 mm), polyvinyl alcohol (PVA) (> 0.3 mm) Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm)

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber (> 0.4 mm), nitrile rubber (> 0.75 mm),

neoprene (> 0.35 mm), Viton® (> 0.7 mm), 4H/Silver Shield® (> 0.07 mm)

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.

-	
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. chemical-resistant protective suit / disposable overall
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

<u>Appearance</u>		
Physical state	1	Liquid.
Colour	1	Clear.
Odour	:	Characteristic.
Odour threshold	:	Not applicable.
Melting point/freezing point	1	Not applicable.
Initial boiling point and boiling range		Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 132.88°C (271.2°F)
Flammability	1	Not applicable.
Upper/lower flammability or explosive limits	:	0.8 - 13.74%
Flash point	:	Closed cup: 24°C (75.2°F)
Auto-ignition temperature		Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).
Decomposition temperature	1	Not available.
рН	1	Not applicable.
Viscosity	1	Kinematic (40°C): <20.5 mm²/s
Solubility(ies)	:	
Media		Result
a a lal susata a		

Media	Result				
cold water hot water	Not soluble Not soluble				
Partition coefficient: n-octano water	: Not available.				
Vapour pressure	: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.93 kPa (6.98 mm Hg) (at 20°C)				
Evaporation rate	Highest known value: 0.84 (ethylbenzene) Weighted average: 0.68compared with butyl acetate				
Density	: 0.87 g/cm ³				
Vapour density	Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.41 (Air = 1)				
Explosive properties	Not available.				
Oxidising properties	: Not available.				
Particle characteristics					
Median particle size	: Not applicable.				
Date of issue/Date of revision	: 05.04.2024 Date of previous issue : 02.05.2023 Version : 1.04 11/				

SECTION 9: Physical and chemical properties

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity			
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredient	s.	
10.2 Chemical stability	: Stable under recommended storage and handling conditions (see Section 7).		
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.		
10.4 Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products.		
10.5 Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.		
10.6 Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.		

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
x ylene	LC50 Inhalation Vapour	Rat	11 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	11 mg/l	4 hours
-	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
cyclohexanone	LC50 Inhalation Gas.	Rat	8000 ppm	4 hours
-	LD50 Dermal	Rabbit	1 mL/kg	-
	LD50 Oral	Rat	1800 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-

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)
Jotun Thinner No. 23	2264.2	1955.6	N/A	15.2	N/A
xylene	4300	1100	N/A	11	N/A
butan-1-ol	500	N/A	N/A	N/A	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
cyclohexanone	1800	1100	N/A	11	N/A
1-methoxy-2-propanol	6600	13000	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
cyclohexanone	Eyes - Irritant	Mammal - species unspecified	-	-	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	
	Skin - Mild irritant	Human	-	48 hours 50 Percent	-

SECTION 11: Toxicological information

	Skin - Mild irritant	Mammal - species unspecified	-	-	-		
	Skin - Mild irritant	Rabbit	-	500 milligrams	-		
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-		
	Skin - Mild irritant	Rabbit	-	500 mg	-		

Sensitisation

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

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects : No known significant effects or critical hazards.

Fertility effects

: No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

Potential acute health effects

Eye contact	:	Causes serious eye damage.
Inhalation	1	Farmful if inhaled. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	:	Harmful in contact with skin. Causes skin irritation.
Ingestion	:	May be fatal if swallowed and enters airways.
Symptoms related to the phy	sic	cal, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain watering redness

SECTION 11: Toxicological information

Inhalation	: Adverse symptoms may include the following:
	respiratory tract irritation
	coughing
	nausea or vomiting
	headache
	drowsiness/fatigue
	dizziness/vertigo
	unconsciousness
Skin contact	: Adverse symptoms may include the following:
	pain or irritation
	redness
	blistering may occur
Ingestion	: Adverse symptoms may include the following:
	stomach pains
	nausea or vomiting
General	: May cause damage to organs through prolonged or repeated exposure.
Other information	: None identified.

SECTION 12: Ecological information

12.1 Toxicity

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

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

Product/ingredient name	Result	Species	Exposure
x ylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Diatom - Skeletonema costatum	96 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
cyclohexanone	Acute EC50 32.9 mg/l Fresh water	Algae - Green algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours
	Chronic EC10 3.56 mg/l Fresh water	Algae - Green algae - Chlamydomonas reinhardtii - Exponential growth phase	72 hours

Conclusion/Summary : This material is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<mark>ky</mark> lene ethylbenzene	-		Readily Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	8.1 to 25.9	low
butan-1-ol	1	-	low
ethylbenzene	3.6	-	low
cyclohexanone	0.86	-	low
1-methoxy-2-propanol	<1	-	low

SECTION 12: Ecological information

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

Product	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: Yes.

Waste catalogue

Waste code	Waste designation
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

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

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint related material	Paint related material	Paint related material	Paint related material
14.3 Transport hazard class(es)	3	3	3	3
Date of issue/Date of re	vision : 05.04.2024	Date of previous issue	: 02.05.2023	Version : 1.04 15/1

SECTION 14:	Transp	or	t information			
14.4 Packing group					111	
14.5 Environmental hazards	No.		Yes.	No.	No.	
Additional informat	tion				· · · · · · · · · · · · · · · · · · ·	
ADR/RID		:	Hazard identification nu Tunnel code (D/E)	mber 30		
ADN			The product is only regula transported in tank vessel	et is only regulated as an environmentally hazardous substance when I in tank vessels.		
IMDG		:	Emergency schedules	-Е, <u>S-Е</u>		
14.6 Special precau user	tions for	:		e that persons transpor	sport in closed containers that are ting the product know what to do ir	
14.7 Transport in bu according to IMO instruments	ılk	:	Not available.			
SECTION 15: I	Regula	to	ry information			
45.4 Cofety, boolth a	and a marke		nental regulations/legisla		- In the second state of t	

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants Not listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market

and use of certain dangerous substances, mixtures and articles

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category		
P5c		
EU regulations Industrial emissions (integrated pollution prevention and control) - Air	: Not listed	

Date of issue/Date of revision

SECTION 15: Regulatory information

Montreal Protocol Not listed.	
Stockholm Convention on Pe Not listed.	rsistent Organic Pollutants
Rotterdam Convention on Pri Not listed.	or Informed Consent (PIC)
UNECE Aarhus Protocol on P Not listed.	OPs and Heavy Metals
15.2 Chemical safety : assessment	This product contains substances for which Chemical Safety Assessments are still required.
SECTION 16: Other inf	formation

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
-	Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
	No. 720 and amendments
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = GB CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Acute Tox. 4, H312	Calculation method
Acute Tox. 4, H332	Calculation method
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

Soluri mininer No. 25

SECTION 16: Other information

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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revision	
Date of previous issue	e : 02.05.2023
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