

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

: Barrier 80 S (EU) Comp B
: E08K-G4P3-Q008-U2GF
: 51366
: Hardener.
: Liquid.
: 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

Jotun A/S P.O.Box 2021 3202 Sandefjord Norway

Tel: + 47 33 45 70 00 Fax: +47 33 45 72 42 E-mail: SDSJotun@jotun.no

1.4 Emergency telephone number

Norwegian National Poison Centre: +47 22 59 13 00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 (hearing organs) Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



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

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥25 - ≤50	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	ATE [Dermal] = 1100 mg/kg ATE [Inhalation (vapours)] = 20 mg/ I	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≥10 - <20	Flam. Liq. 3, H226 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	ATE [Inhalation (vapours)] = 17.8 mg/l	[1] [2]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2 Index: 603-069-00-0	<3	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318	ATE [Oral] = 1673 mg/kg	[1]
3,6-diazaoctanethylenediamin	REACH #: 01-2119487919-13 EC: 203-950-6 CAS: 112-24-3	<1	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412 See Section 16 for the full text of the H	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg	[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.

Туре

[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

General	: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

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

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 3,6-diazaoctanethylenediamin. May produce an allergic reaction.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

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.

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 f	from	1 the substance or mixture
Hazards from the substance or mixture	:	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective equipment for fire-fighters		Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	te	ctive equipment and emergency procedures
For non-emergency personnel	:	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
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	:	Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
6.3 Methods and material for containment and cleaning up	:	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). Preferably clean with a detergent. Avoid using solvents.
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

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

SECTION 7: Handling and storage

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

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

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	FOR-2011-12-06-1358 (Norway, 6/2021). Absorbed through skin. Notes: H E
	TWA: 108 mg/m ³ 8 hours. TWA: 25 ppm 8 hours.
1-methoxy-2-propanol	FOR-2011-12-06-1358 (Norway, 6/2021). Absorbed through skin. Notes: indicative limit value
	TWA: 180 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	FOR-2011-12-06-1358 (Norway, 6/2021). Absorbed through skin. Notes: H K E
	TWA: 5 ppm 8 hours. TWA: 20 mg/m ³ 8 hours.
3,6-diazaoctanethylenediamin	FOR-2011-12-06-1358 (Norway, 6/2021). Skin sensitiser. TWA: 6 mg/m ³ 8 hours. TWA: 1 ppm 8 hours.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures	: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be
	documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Туре	Exposure		Population	Effects
DNEL	Long term	65.3 mg/m ³		Local
		000		1 1
DNEL		260 mg/m ³		Local
DUE		000 / 3		
DNEL		260 mg/m ³		Systemic
DNEL		221 mg/m³	Workers	Local
DNEL		12.5 ma/	General	Systemic
	5			5
DNEL	Long term			Systemic
		eereg,		-) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
DNFI		125 ma/ka		Systemic
DITE	Long tonin Donnai			oyotonno
	Long term Dermal			Systemic
		bw/day		
DNEL	Long term Inhalation	221 mg/m³	Workers	Systemic
DNEL	Short term	442 mg/m ³	Workers	Local
	Inhalation	Ū		
DNEL		442 ma/m ³	Workers	Systemic
		.		5
DNEL		33 ma/ka	General	Systemic
				- ,
DNFI	l ong term			Systemic
DITE		ioio ilig/ili		oyotonno
DNEI		78 ma/ka		Systemic
DINCE	Long tonn Donna			Cysternio
	Long term Dermal			Systemic
DINCL	Long term Dermai		WOIKEIS	Oysternic
DNEL	Long term		Workers	Systemic
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DNEL		553.5 ma/	Workers	Local
DNEL			Workers	Systemic
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DNFI	l ong term			Systemic
DITE	0	i o mg/m		oyotonno
DNEI		77 ma/m ³		Systemic
DINCE	0	r ing/in	Workers	Cysternio
		180 mg/kg	Workers	Systemic
DINCL	Long term Derma		WOIKEIS	Oysternic
	Short term		Workers	Local
		200 mg/m		
רשעם		$1/2 m a/m^3$	Workers	Local
		442 mg/m	VVUINCIS	LUCAI
DMEL	Short term	884 mg/m³	Workers	Systemic
		1 004 IIIU/III	VVUINCIS	Systemic
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	InhalationDNELShort term InhalationDNELShort term InhalationDNELLong term InhalationDNELLong term OralDNELLong term OralDNELLong term DermalDNELLong term DermalDNELLong term DermalDNELLong term OralDNELLong term OralDNELLong term OralDNELLong term OralDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELLong term OralDNELLong term OralDNELLong term DermalDNELLong term DermalDNELLong term OralDNELLong term OralDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELLong term OralDNELLong term OralDNELLong term OralDNELLong term OralDNELLong term OralDNELLong term InhalationDNELLong term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term InhalationDNELShort term Inh	Inhalation260 mg/m³DNELShort term260 mg/m³InhalationNELShort term260 mg/m³InhalationInhalation221 mg/m³InhalationInhalation12.5 mg/DNELLong term Oral12.5 mg/InhalationInhalation12.5 mg/DNELLong term Oral125 mg/kgDNELLong term Dermal125 mg/kgDNELLong term Dermal212 mg/kgDNELLong term Dermal212 mg/kgDNELLong term Dermal212 mg/kgDNELShort term442 mg/m³InhalationNELShort termDNELShort term442 mg/m³InhalationNELLong term OralDNELLong term Dermal78 mg/kgbw/dayDNELLong term DermalDNELLong term Dermal78 mg/kgbw/dayDNELLong term DermalDNELLong term Dermal183 mg/kgbw/dayDNELLong termDNELLong term553.5 mg/Inhalationm³DNELLong term Oral1.6 mg/kgbw/dayDNELLong term77 mg/m³InhalationNm³DNELLong term15 mg/m³InhalationNm³DNELLong term180 mg/kgbw/dayDNELLong termDNELLong term293 mg/m³InhalationNm³DNELLong term293 mg/m³InhalationM	InhalationpopulationDNELShort term260 mg/m³GeneralInhalationShort term260 mg/m³GeneralDNELShort term221 mg/m³WorkersInhalation12.5 mg/generalDNELLong term Oral12.5 mg/DNELLong term Dermal125 mg/kgDNELLong term Dermal125 mg/kgDNELLong term Dermal125 mg/kgDNELLong term Dermal125 mg/kgDNELLong term Dermal212 mg/kgDNELLong term221 mg/m³NELKopt term442 mg/m³InhalationMorkersDNELShort term442 mg/m³Inhalation33 mg/kgDNELShort term33 mg/kgDNELLong term Dermal78 mg/kgDNELLong term553.5 mg/NorkersMorkersInhalationm³DNELShort term15 mg/kgDNELLong term Oral16 mg/kgDNELLong term Oral16 mg/kgDNELLong term77 mg/m³NorkersMorkersInhalationm³DNELLong term16 mg/kgDNELLong term Dermal180 mg/kgDNELLong te

SECTION 8: Exposure controls/personal protection

		Inhalation			
2,4,6-tris(dimethylaminomethyl) phenol	DMEL	Long term Dermal	0.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.31 mg/m³	Workers	Systemic
	DNEL	Long term Oral	0.075 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.075 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.075 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.13 mg/m ³		Systemic
	DNEL	Long term Inhalation	0.13 mg/m ³		Systemic
	DNEL	Long term Dermal	0.15 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.53 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	0.6 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2.1 mg/m ³	Workers	Systemic
3,6-diazaoctanethylenediamin	DNEL	Short term Inhalation	5380 mg/ m³	Workers	Systemic
	DNEL	Long term Dermal	0.57 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.028 mg/ cm²	Workers	Local
	DNEL	Short term Dermal	8 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	1600 mg/ m³	General population [Consumers]	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	1 mg/cm²	General population [Consumers]	Local
	DNEL	Long term Dermal	0.25 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	0.29 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Oral	0.41 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.43 mg/ cm²	General population [Consumers]	Local

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	-
1-methoxy-2-propanol	Fresh water	10 mg/l	-
	Marine	1 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	52.3 mg/kg dwt	-
	Marine water sediment	5.2 mg/kg dwt	-
	Soil	5.49 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	-
	Secondary Poisoning	20 mg/kg	-
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0.084 mg/l	-
	Marine	0.0084 mg/l	-
	Sewage Treatment Plant	0.2 mg/l	-
3,6-diazaoctanethylenediamin	Fresh water	190 µg/l	-
-	Marine	38 µg/l	-
	Sewage Treatment Plant	4.25 mg/l	-
	Fresh water sediment	95.9 mg/kg dwt	-
	Marine water sediment	19.2 mg/kg dwt	-
	Soil	19.1 mg/kg dwt	-
	Secondary Poisoning	0.18 mg/kg	-

8.2 Exposure controls		
Appropriate engineering controls	rovide adequate ventilation. Where reasonably practicable, this sho chieved by the use of local exhaust ventilation and good general ext lese are not sufficient to maintain concentrations of particulates and apours below the OEL, suitable respiratory protection must be worn.	raction. If solvent
Individual protection meas		
Hygiene measures	/ash hands, forearms and face thoroughly after handling chemical p ating, smoking and using the lavatory and at the end of the working ppropriate techniques should be used to remove potentially contami /ash contaminated clothing before reusing. Ensure that eyewash st afety showers are close to the workstation location.	period. nated clothing.
Eye/face protection	afety eyewear complying to ISO 16321-1:2022 should be used wher ssessment indicates this is necessary to avoid exposure to liquid sp ases or dusts. If contact is possible, the following protection should nless the assessment indicates a higher degree of protection: chem oggles.	lashes, mists, be worn,
Skin protection		

Hand protection

SECTION 8: Exposure controls/personal 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.

<u>Gloves</u>

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

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm), butyl rubber (> 0.4 mm) Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm) Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.4 mm), 4H/Silver Shield® (> 0.07 mm),

Teflon (> 0.35 mm), polyvinyl alcohol (PVÁ) (> 0.3 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	 Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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

Date of issue/Date of revision	: 24.03.2023 Date of previous issue : 23.03.2023 Version : 1.01 10/18
Viscosity	: Kinematic (40°C): >20.5 mm²/s
рН	: Not applicable.
Decomposition temperature	: Not available.
Auto-ignition temperature	: Lowest known value: 270°C (518°F) (1-methoxy-2-propanol).
Flash point	: Closed cup: 25°C
Lower and upper explosion limit	: 0.8 - 13.74%
Flammability	: Not applicable.
Initial boiling point and boiling range	: Lowest known value: 120.17°C (248.3°F) (1-methoxy-2-propanol). Weighted average: 132.18°C (269.9°F)
Melting point/freezing point	: Not applicable.
Odour threshold	: Not applicable.
Odour	: Hydrocarbon.
Colour	: Grey.
Physical state	: Liquid.
<u>Appearance</u>	

SECTION 9: Physical and chemical properties

-		
Solubility in water	cold water Not soluble hot water Not soluble	
Partition coefficient: n-octanol/ water		
Vapour pressure	Highest known value: 1.2 kPa (9.3 mr average: 0.96 kPa (7.2 mm Hg) (at 20	n Hg) (at 20°C) (ethylbenzene). Weighted)°C)
Evaporation rate	Highest known value: 0.84 (ethylbenz with butyl acetate	ene) Weighted average: 0.79compared
Density	0.931 g/cm³	
Vapour density	Highest known value: 3.7(Air = 1)(x	ylene). Weighted average: 3.55 (Air = 1)
Explosive properties	Not available.	
Oxidising properties	Not available.	
Particle characteristics		
Median particle size	Not applicable.	

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 ingredie	ents.		
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	r.		
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 hazard classes as defined in Regulation (EC) No 1272/2008

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

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 3,6-diazaoctanethylenediamin. May produce an allergic reaction.

Acute toxicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
5	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
2,4,6-tris	LD50 Oral	Rat	1673 mg/kg	-
(dimethylaminomethyl)			0.0	
phenol				
, 3,6-diazaoctanethylenediamin	LD50 Oral	Mouse	1600 mg/kg	-
	LD50 Oral	Mouse	38.5 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)
Barrier 80 S (EU) Comp B	61963.0	3459.7	N/A	45.8	N/A
xylene	4300	1100	N/A	20	N/A
1-methoxy-2-propanol	6600	13000	N/A	N/A	N/A
ethylbenzene	3500	N/A	N/A	17.8	N/A
2,4,6-tris(dimethylaminomethyl)phenol	1673	N/A	N/A	N/A	N/A
3,6-diazaoctanethylenediamin	500	1100	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	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
2,4,6-tris (dimethylaminomethyl) phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 µg	-
	Skin - Severe irritant	Rat	-	0.25 ml	-
3,6-diazaoctanethylenediamin	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	49 milligrams	-
	Skin - Severe irritant	Rabbit	-	490 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 milligrams	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
3,6-diazaoctanethylenediamin		Mammal - species unspecified	Sensitising

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.

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SECTION 11: Toxicological information

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
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	

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

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.

Acute LC50 8500 µg/l Marine water		
Addie Looo oooo µg/i Marine Water	Crustaceans - Palaemonetes	48 hours
	pugio	
Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
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
Acute LC50 33900 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 7700 µg/l Marine water Acute EC50 2.93 mg/l Acute LC50 4.2 mg/l Acute LC50 33900 µg/l Fresh water	Acute LC50 13400 μg/l Fresh waterFish - Pimephales promelasAcute EC50 7700 μg/l Marine waterAlgae - Skeletonema costatumAcute EC50 2.93 mg/lDaphniaAcute LC50 4.2 mg/lFish

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

12.2 Persistence and degradability

Conclusion/Summany

Conclusion/Summary	NOL available.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
ethylbenzene	-	-	Readily
3,6-diazaoctanethylenediamin	-	-	Not readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information			
Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
1-methoxy-2-propanol	<1	-	low
ethylbenzene	3.6	-	low
2,4,6-tris	0.219	-	low
(dimethylaminomethyl)			
phenol			
3,6-diazaoctanethylenediamir	-1.66 to -1.4	-	low

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 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

13.1 Waste treatment methods

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

European waste catalogue (EWC)

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

Waste code	Waste designation
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances
Packaging Methods of disposal	 The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 13: Disposal considerations

•		
Disposal considerations	 Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions. 	
Type of packaging		European waste catalogue (EWC)
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances
Special precautions	: 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	

soil, waterways, drains and sewers.

thoroughly internally. Avoid dispersal of spilt material and runoff and contact with

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	111	111		111
14.5 Environmental hazards	No.	Yes.	No.	No.

Additional information		
ADR/RID	:	<u>Hazard identification number</u> 30 <u>Tunnel code</u> (D/E)
ADN	1	The product is only regulated as an environmentally hazardous substance when transported in tank vessels.
IMDG	1	Emergency schedules F-E, <u>S-E</u>
14.6 Special precautions for user	:	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
14.7 Maritime transport in bulk according to IMO	:	Not available.

SECTION 15: Regulatory information

15.1 Safety, health and envir	-		ecific for the substan	ice or mixture	
EU Regulation (EC) No. 190					
Annex XIV - List of substa Annex XIV	nces subject to	aumonsation			
None of the components a	are listed				
Substances of very high					
None of the components a					
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicab	le.			
Other EU regulations					
VOC			2/EC on VOC apply to a sheet for further infor	o this product. Refer to the mation.	he
VOC for Ready-for-Use Mixture	: Not available	9.			
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed				
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed				
Ozone depleting substance Not listed.	<u>:es (1005/2009/E</u>	<u>U)</u>			
Prior Informed Consent (P Not listed.	<u>PIC) (649/2012/E</u>	<u>(r</u>			
Persistent Organic Polluta Not listed.	<u>ants</u>				
Seveso Directive This product may add to the major accident hazards.	calculation for d	etermining whether a	site is within the scope	e of the Seveso Directive	e on
National regulations Industrial use	own assessr legislation. T	nent of workplace risł	ks, as required by othe	not constitute the user's r health and safety ety at work regulations a	
<u>Norway</u>					
Product registration number	: Under decla	ration			
International regulations					
Chemical Weapon Convent Not listed.	<u>ion List Schedu</u>	les I, II & III Chemica	<u>als</u>		
Montreal Protocol Not listed.					
	Porciotant Orca	nio Pollutanto			
Stockholm Convention on I	ersistent Urga				
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SECTION 15: Regulatory information

Not listed.

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

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety	: Not applicable.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement 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 according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
STOT SE 3, H335	Calculation method
STOT RE 2, H373 (hearing organs)	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

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.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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 [CLP/GHS]

SECTION 16: Other information

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 Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
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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