Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

# SAFETY DATA SHEET



# **Tankguard Special Ultra Comp B**

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

<b>1.1 Product identifier</b>	1.1	Prod	luct	ider	ntifier
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Product name	: Tankguard Special Ultra Comp B
Product code	: 8500
Product description	: Hardener.
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

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

: Mixture

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

Flam. Liq. 3, H226 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411

**Product definition** 

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

SECTION 2: Hazards	identification
Hazard pictograms	
Signal word	: Danger.
Hazard statements	<ul> <li>H226 - Flammable liquid and vapour.</li> <li>H314 - Causes severe skin burns and eye damage.</li> <li>H317 - May cause an allergic skin reaction.</li> <li>H335 - May cause respiratory irritation.</li> <li>H411 - Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	
General	: Not applicable.
Prevention	<ul> <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>P273 - Avoid release to the environment.</li> <li>P261 - Avoid breathing vapour.</li> </ul>
Response	<ul> <li>P391 - Collect spillage.</li> <li>P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor.</li> <li>P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting.</li> <li>P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.</li> <li>P363 - Wash contaminated clothing before reuse.</li> <li>P302 + P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.</li> <li>P305 + P351 + P338, 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.</li> </ul>
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.
Hazardous ingredients	<ul> <li>Disphenol f epoxide resin adduct with 1,2-diaminocyclohexane xylene butan-1-ol</li> <li>1,2-cyclohexanediamine m-xylene-alpha,alpha'-diamine</li> <li>3-aminopropyltriethoxysilane</li> </ul>
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	<u>ents</u>
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.
2.3 Other hazards	

# **SECTION 2: Hazards identification**

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII Other hazards which do

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

: None known. not result in classification

# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures	: Mixture	-		<b>T</b>	•
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
sphenol f epoxide resin adduct with 1,2-diaminocyclohexane	CAS: 168612-07-5	≥50 - ≤75	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317	-	[1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	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)] = 11 mg/ I	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	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)] = 11 mg/ I	[1] [2]
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	REACH #: Polymer EC: 500-137-0 CAS: 57214-10-5	≤10	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≤10	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 500 mg/kg	[1] [2]
1,2-cyclohexanediamine	REACH #: 01-2119976312-37 EC: 211-776-7 CAS: 694-83-7	≤5	Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	-	[1]
m-xylene-alpha,alpha'- diamine	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0	≤5	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412 EUH071	ATE [Oral] = 980 mg/kg ATE [Inhalation (vapours)] = 11 mg/ I	[1] [2]
3-aminopropyltriethoxysilane	REACH #:	<1	Acute Tox. 4, H302	ATE [Oral] = 1780	[1]
Date of issue/Date of revision	: 20.02.2024 Date	e of previous is	sue : 24.03.2023	Version : 2	3/18

# SECTION 3: Composition/information on ingredients 01-2119480479-24 Skin Corr. 1B, H314 mg/kg EC: 213-048-4 Eye Dam. 1, H318 Skin Sens. 1B, H317 Index: 612-108-00-0 See Section 16 for 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

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	:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
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	1	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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

## 4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

:	Adverse symptoms may include the following: respiratory tract irritation
	coughing
ct :	Adverse symptoms may include the following: pain or irritation redness blistering may occur
:	Adverse symptoms may include the following: stomach pains
	:

# 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.<br/>The exposed person may need to be kept under medical surveillance for 48 hours.

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## **SECTION 4: First aid measures**

Specific treatments : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefight	tin	g measures
5.1 Extinguishing media Suitable extinguishing media	:	Recommended: alcohol-resistant foam, CO <sub>2</sub> , powders, water spray.
Unsuitable extinguishing media	:	Do not use water jet.
5.2 Special hazards arising f	ron	the substance or mixture
Hazards from the substance or mixture	1	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	ote	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

# **SECTION 7: Handling and storage**

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. 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
E2	200 tonne	500 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**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

## 8.1 Control parameters

## **Occupational exposure limits**

# **SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Exposure limit values
xylene	FOR-2011-12-06-1358 (Norway, 12/2022). [xylen] Absorbed
	through skin. Notes: H E
	TWA: 108 mg/m <sup>3</sup> 8 hours.
	TWA: 25 ppm 8 hours.
ethylbenzene	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through
	skin. Notes: H K E
	TWA: 5 ppm 8 hours.
	TWA: 20 mg/m <sup>3</sup> 8 hours.
butan-1-ol	FOR-2011-12-06-1358 (Norway, 12/2022). Absorbed through
	skin. Notes: H T
	CEIL: 75 mg/m <sup>3</sup>
	CEIL: 25 ppm
m-xylene-alpha,alpha'-diamine	FOR-2011-12-06-1358 (Norway, 12/2022).
	CEIL: 0.1 mg/m <sup>3</sup>

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 required.

## **DNELs/DMELs**

DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	Long term Oral Long term Inhalation Long term Inhalation Long term Dermal Long term Dermal Inhalation Long term Inhalation Short term Inhalation Short term Inhalation	5 mg/kg bw/day 65.3 mg/m <sup>3</sup> 65.3 mg/m <sup>3</sup> 125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	population General population General population Workers Workers Workers General population General	Systemic Local Systemic Systemic Local Systemic Local Systemic
DNEL DNEL DNEL DNEL DNEL DNEL	Inhalation Long term Inhalation Long term Dermal Long term Inhalation Long term Inhalation Short term Inhalation Short term	65.3 mg/m <sup>3</sup> 65.3 mg/m <sup>3</sup> 125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	General population General population General population Workers Workers Workers General population General	Systemic Systemic Systemic Local Systemic Local
DNEL DNEL DNEL DNEL DNEL DNEL	Inhalation Long term Inhalation Long term Dermal Long term Inhalation Long term Inhalation Short term Inhalation Short term	65.3 mg/m <sup>3</sup> 125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	General population General population General population Workers Workers Workers General population General	Systemic Systemic Systemic Local Systemic Local
DNEL DNEL DNEL DNEL DNEL DNEL	Inhalation Long term Inhalation Long term Dermal Long term Dermal Long term Inhalation Long term Inhalation Short term Inhalation Short term	65.3 mg/m <sup>3</sup> 125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	population General population General population Workers Workers Workers General population General	Systemic Systemic Local Systemic Local
DNEL DNEL DNEL DNEL DNEL DNEL	Long term Inhalation Long term Dermal Long term Dermal Long term Inhalation Short term Inhalation Short term Short term	125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	General population General population Workers Workers Workers General population General	Systemic Systemic Local Systemic Local
DNEL DNEL DNEL DNEL DNEL DNEL	Inhalation Long term Dermal Long term Dermal Long term Inhalation Short term Inhalation Short term Short term	125 mg/kg bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	population General population Workers Workers Workers General population General	Systemic Systemic Local Systemic Local
DNEL DNEL DNEL DNEL DNEL	Long term Dermal Long term Inhalation Long term Inhalation Short term Inhalation Short term	bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	General population Workers Workers Workers General population General	Systemic Local Systemic Local
DNEL DNEL DNEL DNEL DNEL	Long term Dermal Long term Inhalation Long term Inhalation Short term Inhalation Short term	bw/day 212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	population Workers Workers Workers General population General	Systemic Local Systemic Local
DNEL DNEL DNEL DNEL	Long term Inhalation Long term Inhalation Short term Inhalation Short term	212 mg/kg bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	Workers Workers Workers General population General	Local Systemic Local
DNEL DNEL DNEL DNEL	Long term Inhalation Long term Inhalation Short term Inhalation Short term	bw/day 221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	Workers Workers General population General	Local Systemic Local
DNEL DNEL DNEL	Inhalation Long term Inhalation Short term Inhalation Short term	221 mg/m <sup>3</sup> 221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	Workers General population General	Systemic Local
DNEL DNEL DNEL	Inhalation Long term Inhalation Short term Inhalation Short term	221 mg/m <sup>3</sup> 260 mg/m <sup>3</sup>	Workers General population General	Systemic Local
ONEL ONEL	Inhalation Short term Inhalation Short term	260 mg/m <sup>3</sup>	General population General	Local
DNEL	Inhalation Short term Inhalation Short term	260 mg/m <sup>3</sup>	General population General	Local
DNEL	Short term Inhalation Short term		population General	
	Inhalation Short term		General	Systemic
	Short term	260 mg/m <sup>3</sup>	General	Systemic
ושואר	Inhalation	U		,
ושואר			population	
JINEL	Short term	442 mg/m <sup>3</sup>	Workers	Local
	Inhalation	5		
DNEL	Short term	442 mg/m <sup>3</sup>	Workers	Systemic
	Inhalation	5		,
DMEL	Long term	442 mg/m <sup>3</sup>	Workers	Local
	Inhalation	0		
DMEL	Short term	884 ma/m <sup>3</sup>	Workers	Systemic
	Inhalation	J. J.		,
DNEL	Long term Oral	1.6 mg/kg	General	Systemic
	U U			,
DNEL	Long term		General	Systemic
		Ŭ	population	,
DNEL	Long term	77 mg/m³	Workers	Systemic
	Inhalation	Ŭ		-
	DMEL DNEL DNEL	DMEL Short term Inhalation DNEL Long term Oral DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term	Inhalation DMEL Short term 884 mg/m <sup>3</sup> Inhalation DNEL Long term Oral 1.6 mg/kg bw/day DNEL Long term 15 mg/m <sup>3</sup> Inhalation DNEL Long term 77 mg/m <sup>3</sup>	Inhalation884 mg/m³WorkersDMELShort term884 mg/m³WorkersInhalation1.6 mg/kgGeneralDNELLong term Oral1.6 mg/kgpopulationDNELLong term15 mg/m³GeneralInhalation77 mg/m³Workers

CTION 8: Exposure co					
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m <sup>3</sup>	Workers	Local
outan-1-ol	DNEL	Long term Oral	1.5625 mg/	General	Systemic
	DNEL	Long term Dermal	kg bw/day 3.125 mg/	population General	Systemic
	DNEL	Long term	kg bw/day 55.357 mg/	population General	Systemic
	DNEL	Inhalation Long term	m³ 155 mg/m³	population General	Local
	DNEL	Inhalation Long term	310 mg/m³	population Workers	Local
1,2-cyclohexanediamine	DNEL	Inhalation Long term	0.13 mg/m³	General	Local
	DNEL	Inhalation Long term Oral	0.25 mg/	population General	Systemic
	DNEL	Short term Inhalation	kg bw/day 0.27 mg/m³	population General population	Local
	DNEL	Long term Inhalation	0.27 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term	0.53 mg/m³	Workers	Local
m-xylene-alpha,alpha'-diamine	DNEL	Long term Inhalation	0.2 mg/m³	Workers	Local
	DNEL	Long term Dermal	0.33 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.2 mg/m <sup>3</sup>	Workers	Systemic
3-aminopropyltriethoxysilane	DNEL	Short term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	59 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	59 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	17.4 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	General <sup>-</sup> population	Systemic
	DNEL	Long term Inhalation	17.4 mg/m³	[Consumers] General population	Systemic
	DNEL	Long term Oral	1 mg/kg	[Consumers] General	Systemic
	DNEL	Long term Dermal	bw/day 1 mg/kg bw/day	population General population	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.5 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term	14 mg/m³	Workers	Systemic

## **PNECs**

#### Tankguard Special Ultra Comp B SECTION 8: Exposure controls/personal protection **Product/ingredient name** Value **Method Detail Compartment Detail x**ylene 0.327 mg/l Fresh water 0.327 mg/l \_ Marine Sewage Treatment 6.58 mg/l \_ Plant Fresh water sediment 12.46 mg/kg dwt 12.46 mg/kg dwt Marine water sediment \_ Soil 2.31 mg/kg dwt ethylbenzene Fresh water 0.1 mg/l \_ 0.01 mg/l \_ Marine Sewage Treatment \_ 9.6 mg/l Plant Fresh water sediment 13.7 mg/kg dwt Soil 2.68 mg/kg dwt -Secondary Poisoning 20 mg/kg butan-1-ol Fresh water 0.082 ma/l \_ 0.0082 mg/l Marine \_ Sewage Treatment 2476 mg/l \_ Plant Fresh water sediment 0.178 mg/kg dwt Marine water sediment 0.0178 mg/kg dwt Soil 0.015 mg/kg dwt 3-aminopropyltriethoxysilane Fresh water 0.33 mg/l Marine 0.033 mg/l Sewage Treatment 13 mg/l Plant Fresh water sediment 1.2 mg/kg dwt

## 8.2 Exposure controls

Appropriate engineering controls	: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
Individual protection meas	<u>iures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
Okin nasta atlan	

Marine water sediment

Soil

0.12 mg/kg dwt

0.05 mg/kg dwt

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## 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.

## SECTION 8: Exposure controls/personal protection

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.

May be used, gloves(breakthrough time) 4 - 8 hours: Viton® (> 0.7 mm), butyl rubber (> 0.4 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm)

Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), nitrile rubber (> 0.75 mm), polyvinyl alcohol (PVA) (> 0.3 mm)

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	<ul> <li>Personnel should wear antistatic clothing made of natural fibres or of high- temperature-resistant synthetic fibres.</li> </ul>
Other skin protection	<ul> <li>Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.</li> </ul>
Respiratory protection	: 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

Appearance			
Physical state	: Liquid.		
Colour	: Colourless.		
Odour	: Characteristic.		
Odour threshold	: Not applicable.		
Melting point/freezing point	: Not applicable.		
Initial boiling point and boiling range	: Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 152.24°C (306°F)		
Flammability	: Not applicable.		
Lower and upper explosion limit	: 0.8 - 11.3%		
Flash point	: Closed cup: 35°C		
Auto-ignition temperature	Lowest known value: 355°C (671°F) (butan-1-ol).		
Decomposition temperature	Not available.		
рН	: Not applicable.		
Viscosity	: Kinematic (40°C): >20.5 mm²/s		
Solubility in water	: cold water Not soluble hot water Not soluble		
Partition coefficient: n-octanol/ water	: Not available.		
Vapour pressure	: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.77 kPa (5.78 mm Hg) (at 20°C)		

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# **SECTION 9: Physical and chemical properties**

Evaporation rate	<ul> <li>Highest known value: 0.84 (ethylbenzene) Weighted average: 0.73compared with butyl acetate</li> </ul>
Density	: 1.043 g/cm³
Vapour density	: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.51 (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 ingredients.
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	1	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

## **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
<b>x</b> ylene	LC50 Inhalation Vapour	Rat	11 mg/l	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 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	-
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-
1,2-cyclohexanediamine	LD50 Oral	Rat	4556 mg/kg	-
m-xylene-alpha,alpha'-	LD50 Oral	Rat	980 mg/kg	-
diamine				
3-aminopropyltriethoxysilane	LD50 Oral	Rat	1780 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)
Fankguard Special Ultra Comp B	7355.3	5884.7	N/A	38.8	N/A
xylene	4300	1100	N/A	11	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
butan-1-ol	500	N/A	N/A	N/A	N/A
1,2-cyclohexanediamine	4556	N/A	N/A	N/A	N/A
m-xylene-alpha,alpha'-diamine	980	N/A	N/A	11	N/A
3-aminopropyltriethoxysilane	1780	N/A	N/A	N/A	N/A

## Irritation/Corrosion

#### **SECTION 11: Toxicological information Product/ingredient name Species** Result Score **Exposure** Rabbit **x**ylene Eyes - Mild irritant 87 milligrams -Skin - Mild irritant 8 hours 60 Rat \_ microliters Rabbit m-xylene-alpha,alpha'-Eyes - Severe irritant 24 hours 50

Skin - Severe irritant

## **Sensitisation**

diamine

Product/ingredient name	Route of exposure	Species	Result
7,2-cyclohexanediamine	skin	Mammal - species unspecified	Sensitising
m-xylene-alpha,alpha'- diamine	skin	Mammal - species unspecified	Sensitising

Rabbit

## **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

## 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
₩ylene	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.

**Observation** 

\_

μg

μg

\_

24 hours 750

# **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
<b>x</b> ylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine)	Acute LC50 25.9 mg/l	Fish	96 hours
m-xylene-alpha,alpha'- diamine	Acute EC50 12 mg/l	Algae	72 hours

**Conclusion/Summary** 

: This material is toxic to aquatic life with long lasting effects.

## 12.2 Persistence and degradability

Conclusion/Summary	: Not available.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
kylene ethylbenzene	-	-	Readily Readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
<b>x</b> ylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
butan-1-ol	1	-	low
m-xylene-alpha,alpha'- diamine	0.18	2.69	low
3-aminopropyltriethoxysilane	1.7	3.4	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	<ul> <li>Do not allow to enter drains or watercourses.</li> <li>Dispose of according to all federal, state and local applicable regulations.</li> <li>If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.</li> <li>For further information, contact your local waste authority.</li> </ul>

## 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.	
Disposal considerations	<ul> <li>Using information provided in this safety data sheet, advice should be obtained fro 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.</li> </ul>	
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 thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.	

# **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN3470	UN3470	UN3470	UN3470
14.2 UN proper shipping name	Paint, corrosive, flammable	Paint, corrosive, flammable	Paint, corrosive, flammable. Marine pollutant (Formaldehyde, oligomeric reaction products with phenol and m-phenylenebis (methylamine))	Paint, corrosive, flammable

14/18

	a Comp B	<u> </u>	information		
SECTION 14: 14.3 Transport hazard class(es)	8 (3)		8 (3)	8 (3)	8 (3)
14.4 Packing group					
14.5 Environmental hazards	Yes.		Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
ADR/RID ADN			izes of ≤5 L or ≤5 kg. <b>lazard identification numl</b> iunnel code (D/E)	<b>ber</b> 83	not required when transported in not required when transported in
IMDG		<ul> <li>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 k</li> <li>Emergency schedules F-E, S-C</li> </ul>			
ΙΑΤΑ		<ul> <li>The environmentally hazardous substance mark may appear if required by other transportation regulations.</li> </ul>			
14.6 Special preca user	utions for	<b>is for</b> : <b>Transport within user's premises:</b> 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.			
	ransport in : Not available. to IMO				

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

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.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

# Other EU regulations

VOC

: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

# **SECTION 15: Regulatory information**

VOC for Ready-for-Use Mixture	:	Not available.
Industrial emissions (integrated pollution prevention and control) - Air	:	Not listed
Industrial emissions (integrated pollution prevention and control) - Water	:	Not listed
Ozone depleting substance	es	<u>(1005/2009/EU)</u>
Not listed.		

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

## **Seveso Directive**

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

## National regulations

Industrial use	: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply
	to the use of this product at work.

Norway Product registration : 302221 number

## International regulations

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

## **Montreal Protocol**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

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

Not listed.

## 15.2 Chemical safety : No Chemical Safety Assessment has been carried out.

## assessment

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

# SECTION 16: Other information

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	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 Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT SE 3, H335	Calculation method
Aquatic Chronic 2, H411	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.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

## Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
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 Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of printing	• 20.02.2024

Date of printing

: 20.02.2024

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Tankguard Special Ultra Comp B         SECTION 16: Other information				
Date of previous issue	: 24.03.2023			

## Version <u>Notice to reader</u>

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