Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

# SAFETY DATA SHEET



# Hardtop XP Comp A

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

#### **1.1 Product identifier**

Product name	: Hardtop XP Comp A
Product code	: 3140
Product description	: Paint.
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 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 telephone number**

National advisory body/Poison Centre			
Telephone number	: Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.		
<u>Supplier</u>			
Telephone number	: +47 33 45 70 00 Jotun Norway (head office)		

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Product definition : Mixture

**Classification according to UK CLP/GHS** 

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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	Warning.	
Hazard statements	H315 - C H317 - M H319 - C	lammable liquid and vapour. auses skin irritation. lay cause an allergic skin reaction. auses serious eye irritation. armful to aquatic life with long lasting effects.
Precautionary statements		
General	Not appli	cable.
Prevention	P210 - K sources. P273 - A	/ear protective gloves. Wear eye or face protection. eep away from heat, hot surfaces, sparks, open flames and other ignition No smoking. void release to the environment. void breathing vapour.
Response	P302 + F P333 + F P305 + F Remove	<ul> <li>P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P313 - If skin irritation or rash occurs: Get medical advice or attention.</li> <li>P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. contact lenses, if present and easy to do. Continue rinsing.</li> <li>P313 - If eye irritation persists: Get medical advice or attention.</li> </ul>
Storage	Not appli	cable.
Disposal		ispose of contents and container in accordance with all local, regional, and international regulations.
Supplemental label elements		- Warning! Hazardous respirable droplets may be formed when sprayed. reathe spray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Not appli	cable.
Special packaging requirem	<u>ts</u>	
Containers to be fitted with child-resistant fastenings	Not appli	cable.
Tactile warning of danger	Not appli	cable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	This mixt vPvB.	ture does not contain any substances that are assessed to be a PBT or a
Other hazards which do not result in classification	None kno	own.

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

3.2 Mixtures

: Mixture

Product/ingredient name	Identifiers	%	Classification	Туре
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤15	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]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4	≤10	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤5	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≤5	Carc. 2, H351 (inhalation)	[1] [*]
hydrocarbons, C9, aromatics	REACH #: 01-2119455851-35 EC: 918-688-5 CAS: 64742-95-6	≤4.3	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
n-butyl methacrylate	REACH #: 01-2119486394-28 EC: 202-615-1 CAS: 97-88-1 Index: 607-033-00-5	<1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335	[1]
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl- 4-piperidinyl) ester, mixt. with 1-methyl 10- (1,2,2,6,6-pentamethyl- 4-piperidinyl) decanedioate	CAS: 1065336-91-5	≤0.3	Skin Sens. 1A, H317 Repr. 2, H361f Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
Oleic acid, compound	EC: 251-846-4 CAS: 34140-91-5	≤0.1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411	[1]
			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>

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

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter  $\leq$  10 µm not bound within a matrix.

Occupational exposure limits, if available, are listed in Section 8.

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

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower
Lye contact	eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. 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. 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

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 n-butyl methacrylate, decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate. May produce an allergic reaction.

#### Over-exposure signs/symptoms

SECTION 4: First aid measures				
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness			
Inhalation	: No specific data.			
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	Specific treatments : No specific treatment.			

See toxicological information (Section 11)

<b>SECTION 5</b> :	Firefighting 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	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 nitrogen oxides metal oxide/oxides	
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**

6.1 Personal precautions, pro	ote	ctive equipment and emergency pr	ocedures	
For non-emergency personnel	:	No action shall be taken involving ar Evacuate surrounding areas. Keep entering. Do not touch or walk throu No flares, smoking or flames in haza Provide adequate ventilation. Wear inadequate. Put on appropriate pers	unnecessary and unpr igh spilt material. Shu ard area. Avoid breath appropriate respirator	otected personnel from t off all ignition sources. hing vapour or mist. when ventilation is
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".				
Date of issue/Date of revision		: 05.04.2024 Date of previous issue	: 21.04.2023	Version : 1.03 5/19

# **SECTION 6: Accidental release measures**

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	or containment 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.	
6.4 Reference to other sections	<ul> <li>See Section 1 for emergency contact information.</li> <li>See Section 8 for information on appropriate personal protective equipment.</li> <li>See Section 13 for additional waste treatment information.</li> </ul>	

# **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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. 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. 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

# **SECTION 7: Handling and storage**

	5	5		
Category			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 solutions	: Not available.

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

#### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
<b>x</b> ylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-, p- or mixed isomers] Absorbed through skin. STEL: 441 mg/m <sup>3</sup> 15 minutes.
	STEL: 100 ppm 15 minutes. TWA: 220 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
n-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 966 mg/m <sup>3</sup> 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m <sup>3</sup> 8 hours. TWA: 150 ppm 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 552 mg/m <sup>3</sup> 15 minutes. STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours. TWA: 441 mg/m <sup>3</sup> 8 hours.

#### **Biological exposure indices**

Product/ingredient name	Exposure indices
<b>x</b> ylene	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.
Percommonded monitoring : Peference	sampling time: post snift.

**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 bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General	Local
	DNEL	Long term	65.3 mg/m³	population General population	Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	221 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term	221 mg/m <sup>3</sup>	Workers	Systemic
te of issue/Date of revision : 05.	04.2024	Date of previous issue	: 21.04.20	)23 Ve	rsion : 1.03

CTION 8: Exposure		Inhalation			
	DNEL	Short term	260 mg/m <sup>3</sup>	General	Local
	DNEL	Inhalation Short term	260 mg/m <sup>3</sup>	population General	Systemic
	DINEL	Inhalation	200 mg/m	population	Systemic
	DNEL	Short term	442 mg/m <sup>3</sup>	Workers	Local
	DNEL	Inhalation Short term	442 mg/m <sup>3</sup>	Workers	Systemic
n-butyl acetate	DNEL	Inhalation Short term	960 mg/m³	Workers	Systemic
	DNEL	Inhalation Short term	960 mg/m³	Workers	Local
	DNEL	Inhalation Long term Inhalation	480 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	480 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	859.7 mg/ m³	General population	Systemic
	DNEL	Short term Inhalation	859.7 mg/ m³	[Consumers] General population	Local
	DNEL	Long term Inhalation	102.34 mg/ m³	[Consumers] General population	Systemic
	DNEL	Long term Inhalation	102.34 mg/ m³	[Consumers] General population	Local
	DNEL	Long term Oral	2 mg/kg	[Consumers] General	Systemic
	DNEL	Short term Oral	bw/day 2 mg/kg	population General	Systemic
	DNEL	Long term Dermal	bw/day 3.4 mg/kg bw/day	population General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	35.7 mg/m³		Local
	DNEL	Long term Inhalation	48 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	300 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	300 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	300 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	600 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	600 mg/m <sup>3</sup>	Workers	Systemic
thylbenzene	DMEL	Long term Inhalation	442 mg/m <sup>3</sup>	Workers	Local
	DMEL	Short term Inhalation	884 mg/m³	Workers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term	15 mg/m³	General	Systemic

		Inhalation		population	
	DNEL	Long term	77 mg/m³	Workers	Systemic
	DNEL	Inhalation Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Short term	293 mg/m <sup>3</sup>	Workers	Local
titanium dioxide	DNEL	Inhalation Long term Inhalation	28 µg/m³	General population	Local
	DNEL	Long term Inhalation	170 µg/m³	Workers	Local
hydrocarbons, C9, aromatics	DNEL	Long term Dermal	12.5 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	151 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	7.5 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	32 mg/m³	General population	Systemic
	DNEL	Long term Oral	7.5 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Long term Inhalation	0.41 mg/m <sup>3</sup>	[Consumers] General	Systemic
	DNEL	Long term	1.9 mg/m³	population Workers	Systemic
	DNEL	Long term Inhalation	178.57 mg/ m³	General population	Local
	DNEL	Short term Inhalation	640 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	837.5 mg/ m³	Workers	Local
	DNEL	Short term Inhalation	1066.67 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	1152 mg/ m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	1286.4 mg/ m³	Workers	Systemic
n-butyl methacrylate	DNEL	Long term Dermal	3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	66.5 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	366.4 mg/ m³	General population	Local
	DNEL	Long term Inhalation	409 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	415.9 mg/ m³	Workers	Systemic
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10- (1,2,2,6,6-pentamethyl-4-piperidinyl)	DNEL	Long term Oral	0.18 mg/ kg bw/day	General population	Systemic
decanedioate	DNEL	Long term	0.31 mg/m³	General	Systemic
	DNEL	Inhalation Long term Dermal	0.9 mg/kg	population General	Systemic
	DNEL	Long term	bw/day 1.27 mg/m³	population Workers	Systemic
	DNEL	Inhalation Long term Dermal	1.8 mg/kg	Workers	Systemic

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

-		1010/p				
				bw/day		
	Oleic acid, compound	DNEL	Long term Oral	5 µg/kg bw/ dav	General population	Systemic
		DNEL	Long term Dermal	5 µg/kg bw/ dav		Systemic
		DNEL	Long term Dermal	14 µg/kg bw/day	Workers	Systemic
		DNEL	Long term Inhalation	17.4 µg/m³	General population	Systemic
		DNEL	Long term Inhalation	98.4 µg/m³	Workers	Systemic

## **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment	6.58 mg/l	-
	Plant		
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Sewage Treatment	35.6 mg/l	-
	Plant		
	Fresh water sediment	0.981 mg/kg dwt	-
	Marine water sediment	0.0981 mg/kg dwt	
	Soil	0.0903 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	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	-

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 measu	res	
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.
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.

## Gloves

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

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

Not recommended, gloves(breakthrough time) < 1 hour: Viton® (> 0.7 mm)

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

Odour	: Characteristic.
Odour threshold	: Not applicable.
Melting point/freezing point	: Not applicable.
Initial boiling point and boiling range	: Lowest known value: 126°C (258.8°F) (n-butyl acetate). Weighted average: 140.81°C (285.5°F)
Flammability	: Not applicable.
Upper/lower flammability or explosive limits	: 0.8 - 9.8%
Flash point	: Closed cup: 32°C (89.6°F)
Date of issue/Date of revision	: 05.04.2024 Date of previous issue : 21.04.2023 Version : 1.03 11/19

<b>SECTION 9: Physical a</b>	chemical properties	
Auto-ignition temperature	Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics).	
Decomposition temperature	Not available.	
рН	Not applicable.	
Viscosity	Kinematic (40°C): >20.5 mm²/s	
Solubility(ies)		
Media	Result	
cold water hot water	Not soluble Not soluble	
Partition coefficient: n-octanol	Not available.	
Vapour pressure	Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate). Weighted average: 0.95 kPa (7.13 mm Hg) (at 20°C)	
Evaporation rate	Highest known value: 1 (n-butyl acetate) Weighted average: 0.78compare butyl acetate	d with
Density	1.205 to 1.452 g/cm³	
Vapour density	Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3. (Air = 1)	78
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**

:	No specific test data related to reactivity available for this product or its ingredients.
:	Stable under recommended storage and handling conditions (see Section 7).
:	Under normal conditions of storage and use, hazardous reactions will not occur.
1	When exposed to high temperatures may produce hazardous decomposition products.
1	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
:	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

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.

# **SECTION 11: Toxicological information**

Contains n-butyl methacrylate, decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate. May produce an allergic reaction.

#### 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	-
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	13100 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	-
n-butyl methacrylate	LD50 Oral	Rat	16 g/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)
Hardtop XP Comp A	N/A	9487.6	N/A	71.1	N/A
xylene	4300	1100	N/A	11	N/A
n-butyl acetate	13100	N/A	N/A	N/A	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
n-butyl methacrylate	16000	N/A	N/A	N/A	N/A

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>x</b> ylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
n-butyl methacrylate	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Rabbit	-	500 microliters	-

## **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
-butyl methacrylate	skin	Mammal - species unspecified	Sensitising

#### **Mutagenicity**

No known significant effects or critical hazards.

#### **Carcinogenicity**

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

No known significant effects or critical hazards.

## Reproductive toxicity

- **Developmental effects**
- No known significant effects or critical hazards.No known significant effects or critical hazards.

#### **Teratogenicity**

**Fertility effects** 

No known significant effects or critical hazards. Specific target organ toxicity (single exposure)

# **SECTION 11: Toxicological information**

<b>v</b>			
Product/ingredient name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
n-butyl acetate	Category 3	-	Narcotic effects
hydrocarbons, C9, aromatics	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
n-butyl methacrylate	Category 3	-	Respiratory tract irritation

## Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
€thylbenzene	Category 2	-	hearing organs
Oleic acid, compound	Category 2		-

Aspiration hazard

Product/ingredient name	Result	
xylene	ASPIRATION HAZARD - Category 1	
ethylbenzene	ASPIRATION HAZARD - Category 1	
hydrocarbons, C9, aromatics	ASPIRATION HAZARD - Category 1	

Potential acute health effects		
Eye contact	1	Causes serious eye irritation.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	1	No known significant effects or critical hazards.
Symptoms related to the physical sectors and the sectors and the sector sectors and the sectors and the sectors and the sectors are set of the sectors and the sectors are set of the s	sic	cal, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	1	No specific data.
Skin contact	:	Adverse symptoms may include the following: irritation redness
Ingestion	1	No specific data.
General	:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Other information	1	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.

# **SECTION 12: Ecological information**

Product/ingredient name	Result	Species	Exposure
xylene	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/Ĭ	Fish	96 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Water flea - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Mummichog - Fundulus heteroclitus	96 hours
hydrocarbons, C9, aromatics	Acute EC50 <10 mg/l	Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
n-butyl methacrylate	Chronic NOEC 2.6 mg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	21 days
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl- 4-piperidinyl) ester, mixt. with 1-methyl 10- (1,2,2,6,6-pentamethyl- 4-piperidinyl) decanedioate	Acute EC50 1.68 mg/l	Algae	96 hours
	Acute LC50 0.9 mg/l	Fish	96 hours
	Chronic NOEC 1 mg/l	Daphnia	21 days

**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
<b>x</b> ylene	-	-	Readily
ethylbenzene	-	-	Readily
hydrocarbons, C9, aromatics	-	-	Not readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>x</b> ylene	3.12	8.1 to 25.9	low
n-butyl acetate	2.3	-	low
ethylbenzene	3.6	-	low
hydrocarbons, C9, aromatics	-	10 to 2500	high
n-butyl methacrylate	2.99	-	low

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

Date of issue/Date of revision : 05.04.2024	Date of previous issue	: 21.04.2023	Version	:1.03	15/19
---	------------------------	--------------	---------	-------	-------

# **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 ii	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 internally. Avoid dispersal of spilt material and runoff and contact with ays, 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	Paint	Paint	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	111	111	111	111
14.5 Environmental hazards	No.	Yes.	No.	No.
Additional informa	ation			
ADR/RID	<b>Special</b>	identification number provisions 640E	: 30	

<u>Tunnel code</u> (D/E)

DR/RID: Viscous substance. Not goods of class 3, ref. 2.2.3.1.5 (only applicable to receptacles < 450 litre capacity).

SECTION 14: Transport information		
ADN	he product is only regulated as an environmentally hazardous substance ansported in tank vessels.	when
IMDG	imergency schedules F-E, <u>S-E</u>	
	MDG: Viscous substance. Transport in accordance with 2.3.2.5 of the IME only applicable to receptacles < 450 litre capacity).	)G Code
14.6 Special precautions for user	<b>ransport within user's premises:</b> always transport in closed containers pright and secure. Ensure that persons transporting the product know where event of an accident or spillage.	
14.7 Transport in bulk according to IMO instruments	lot available.	

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

## 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
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
International regulations	
Chemical Weapon Conventi	on List Schedules I, II & III Chemicals

# **SECTION 15: Regulatory information**

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
asse	ssment	

: This product contains substances for which Chemical Safety Assessments are still required.

# **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate 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
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

<mark>⊮</mark> 225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

## Full text of classifications

# **SECTION 16: Other information**

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
Carc. 2	CARCINOGENICITY - Category 2
	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of printing	: 05.04.2024
Date of issue/ Date of revision	: 05.04.2024
Date of previous issue	: 21.04.2023

Version

: 1.03

#### Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.