# SAFETY DATA SHEET



# **Hardtop Eco Comp A**

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

1.1 Product identifier

Product name : Hardtop Eco Comp A

Product code : 30060
Product description : Paint.
Product type : Liquid.

Other means of : Not available.

identification

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

Use in coatings - Industrial use

1.3 Details of the supplier of the safety data sheet

Jotun A/S Jotun Paints (Europe) Ltd.

P.O.Box 2021 Stather Road

3202 Sandefjord Flixborough, Scunthorpe Norway North Lincolnshire

Tel: +47 33 45 70 00 DN15 8RR

Fax: +47 33 45 72 42 England

E-mail: SDSJotun@jotun.no

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.

**Supplier** 

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 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

Hazard pictograms





Signal word : Warning.

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### SECTION 2: Hazards identification

**Hazard statements** : H226 - Flammable liquid and vapour.

H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements** 

General : Not applicable.

Prevention : P280 - Wear protective gloves.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment.

P261 - Avoid breathing vapour.

Response : P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Supplemental label

elements

: EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed.

Do not breathe spray or mist.

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

#### **Special packaging requirements**

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

#### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification

: None known.

# SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Type
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4	≤13	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≥10 - ≤25	Carc. 2, H351 (inhalation)	[1] [*]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤6.8	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
pentane-2,4-dione	REACH #: 01-2119458968-15	≤3	Flam. Liq. 3, H226 Acute Tox. 4, H302	[1]

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Hardtop Eco Comp A **SECTION 3: Composition/information on ingredients** EC: 204-634-0 Acute Tox. 3, H311 CAS: 123-54-6 Acute Tox. 3, H331 Index: 606-029-00-0 CAS: 1065336-91-5 decanedioic acid, 1,10-bis ≤1 Skin Sens. 1A, H317 [1] (1,2,2,6,6-pentamethyl-Repr. 2, H361f 4-piperidinyl) ester, mixt. with Aquatic Acute 1, H400 1-methyl 10-(M=1)(1,2,2,6,6-pentamethyl-Aquatic Chronic 1, 4-piperidinyl) decanedioate H410 (M=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.

#### **Type**

- [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 ≤ 10 µm not bound within a matrix.

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

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

#### 4.1 Description of first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

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.

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

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

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 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**

**Eye contact** : No specific data. **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 : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

See toxicological information (Section 11)

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.

Unsuitable extinguishing

: Do not use water jet.

media

#### 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 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.

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# **SECTION 5: Firefighting measures**

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, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions** 

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

#### 6.3 Methods and material for 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 spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# 6.4 Reference to other sections

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

# **SECTION 7: Handling and storage**

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

#### 7.1 Precautions for safe handling

**Protective measures** 

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

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# **SECTION 7: Handling and storage**

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**

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

See Technical Data Sheet / packaging for further information.

#### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

# SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).  STEL: 966 mg/m³ 15 minutes.  STEL: 200 ppm 15 minutes.  TWA: 724 mg/m³ 8 hours.  TWA: 150 ppm 8 hours.
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.  STEL: 548 mg/m³ 15 minutes.  STEL: 100 ppm 15 minutes.  TWA: 274 mg/m³ 8 hours.  TWA: 50 ppm 8 hours.

#### **Biological exposure indices**

No exposure indices known.

Recommended monitoring procedures

: 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** 

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

Product/ingredient name	Туре	Exposure	Value	Population	Effects
n-butyl acetate	DNEL	Short term	960 mg/m <sup>3</sup>	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/m³	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 [Consumers]	Systemic
	DNEL	Long term Inhalation	102.34 mg/ m³	General population	Local
	DNEL	Long term Oral	2 mg/kg bw/day	[Consumers] General population	Systemic
	DNEL	Short term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.4 mg/kg bw/day	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 General	Systemic
	DNEL	Long term Inhalation Long term	12 mg/m <sup>3</sup> 35.7 mg/m <sup>3</sup>	population General	Systemic Local
	DNEL	Inhalation	48 mg/m³	population Workers	
	DNEL	Long term Inhalation Short term	300 mg/m <sup>3</sup>	General	Systemic Local
	DNEL	Inhalation Short term	300 mg/m <sup>3</sup>	population General	Systemic
	DNEL	Inhalation Long term	300 mg/m³	population Workers	Local
	DNEL	Inhalation Short term	600 mg/m³	Workers	Local
	DNEL	Inhalation Short term	600 mg/m³	Workers	Systemic
titanium dioxide	DNEL	Inhalation Long term Inhalation	28 μg/m³	General population	Local
	DNEL	Long term Inhalation	170 μg/m³	Workers	Local
2-methoxy-1-methylethyl acetate	DNEL	Long term Dermal	153.5 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	275 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	54.8 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	33 mg/m³	General population [Consumers]	Systemic

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

	DNEL	Long term Oral	1.67 mg/	General	Systemic
			kg bw/day	population	
				[Consumers]	
	DNEL	Long term	33 mg/m³	General	Local
		Inhalation	J	population	
	DNEL	Long term	33 mg/m³	General	Systemic
		Inhalation	J	population	'
	DNEL	Long term Oral	36 mg/kg	General	Systemic
			bw/day	population	'
	DNEL	Long term	275 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			- ,
	DNEL	Long term Dermal	320 mg/kg	General	Systemic
			bw/day	population	-,
	DNEL	Short term	550 mg/m <sup>3</sup>	Workers	Local
	DIVEL	Inhalation	ooo mg/m	Workoro	Local
	DNEL	Long term Dermal	796 mg/kg	Workers	Systemic
	DIVEL	Long tonin Donnar	bw/day	Workoro	Cycloniio
pentane-2,4-dione	DNEL	Long term Oral	7 mg/kg	General	Systemic
pentane 2,4 dione	DIVLE	Long tonn Oran	bw/day	population	Cystonno
	DNEL	Long term Dermal	12 mg/kg	Workers	Systemic
	DIVLL	Long term berman	bw/day	WORKEIS	Cysternic
	DNEL	Long term	84 mg/m <sup>3</sup>	Workers	Systemic
	DIVLL	Inhalation	04 mg/m	WOIKEIS	Cysternic
decanedioic acid, 1,10-bis	DNEL	Long term Oral	0.18 mg/	General	Systemic
(1,2,2,6,6-pentamethyl-4-piperidinyl)	DINLL	Long term Oral	kg bw/day	population	Systemic
ester, mixt. with 1-methyl 10-			kg bw/day	population	
(1,2,2,6,6-pentamethyl-4-piperidinyl)					
decanedioate					
uecaneuloate	DNEL	Long torm	0.31 mg/m <sup>3</sup>	General	Systemic
	DINEL	Long term Inhalation	0.31 mg/m²		Systemic
	DNE		0.0 mg/k=	population	Cyatamia
	DNEL	Long term Dermal	0.9 mg/kg	General	Systemic
	חאבו		bw/day	population	Cuetamia
	DNEL	Long term	1.27 mg/m <sup>3</sup>	Workers	Systemic
	ראבי	Inhalation	4.0	\\/ = w  < = w=	Cuatamais
	DNEL	Long term Dermal	1.8 mg/kg	Workers	Systemic
			bw/day		

### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
<mark>ଜ</mark> -butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Sewage Treatment Plant	35.6 mg/l	-
	Fresh water sediment	0.981 mg/kg dwt	-
	Marine water sediment	0.0981 mg/kg dwt	-
	Soil	0.0903 mg/kg dwt	-
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	-
	Marine	0.0635 mg/l	-
	Sewage Treatment Plant	100 mg/l	-
	Fresh water sediment	3.29 mg/kg dwt	-
	Marine water sediment	0.329 mg/kg dwt	-
	Soil	0.29 mg/kg dwt	-

### 8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### **Individual protection measures**

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

#### **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: safety glasses with side-shields.

#### **Skin protection**

## **Hand protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

#### **Gloves**

₩ear suitable gloves tested to ISO 374-1:2016.

Recommended, gloves(breakthrough time) > 8 hours: Teflon (> 0.35 mm), polyvinyl alcohol (PVA) (> 0.3 mm), butyl rubber (> 0.4 mm)

May be used, gloves(breakthrough time) 4 - 8 hours: 4H/Silver Shield® (> 0.07 mm), neoprene (> 0.35 mm), nitrile rubber (> 0.75 mm), PVC (> 0.5 mm), Viton® (> 0.7 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

### **Appearance**

Physical state : Liquid.

Colour : Grey, MCI Base 1, MCI Base 2, MCI Base 3, Red

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# SECTION 9: Physical and chemical properties

Odour Characteristic. **Odour threshold** Not applicable. Melting point/freezing point Not applicable.

Initial boiling point and Lowest known value: 126°C (258.8°F) (n-butyl acetate). Weighted average:

133.64°C (272.6°F) boiling range

**Flammability** : Not applicable. **Upper/lower flammability or** : 1.4 - 11.6% explosive limits

Flash point : Closed cup: 32°C (89.6°F)

**Auto-ignition temperature** Lowest known value: 333°C (631.4°F) (2-methoxy-1-methylethyl acetate).

**Decomposition temperature** Not available. pН Not applicable. **Viscosity** Not available.

Solubility(ies)

Media	Result
cold water	Not soluble
hot water	Not soluble

Partition coefficient: n-octanol/: Not available.

water

Vapour pressure Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate).

Weighted average: 1.09 kPa (8.18 mm Hg) (at 20°C)

Highest known value: 1 (n-butyl acetate) Weighted average: 0.76compared with **Evaporation rate** 

butyl acetate

**Density** : 1.451 to 1.496 g/cm<sup>3</sup>

Vapour density Highest known value: 4.6 (Air = 1) (2-methoxy-1-methylethyl acetate).

Weighted average: 4.11 (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 : Under normal conditions of storage and use, hazardous reactions will not occur.

hazardous reactions

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.

: Decomposition products may include the following materials: carbon monoxide, 10.6 Hazardous decomposition products carbon dioxide, smoke, oxides of nitrogen.

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# **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.

Contains 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
<mark>ଜ-</mark> butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	13100 mg/kg	-
2-methoxy-1-methylethyl	LD50 Dermal	Rabbit	>5 g/kg	-
acetate				
	LD50 Oral	Rat	8532 mg/kg	-
pentane-2,4-dione	LD50 Oral	Mouse	951 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)
Mardtop Eco Comp A n-butyl acetate 2-methoxy-1-methylethyl acetate pentane-2,4-dione	19309.2	11585.5	N/A	115.9	N/A
	13100	N/A	N/A	N/A	N/A
	8532	N/A	N/A	N/A	N/A
	500	300	N/A	3	N/A

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
pentane-2,4-dione	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	6 hours 11.2	-
				Mililiters	
				Intermittent	
	Skin - Mild irritant	Rabbit	-	488	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	48 hours	-
				11.2 Mililiters	
				Intermittent	
	Skin - Moderate irritant	Rabbit	-	6 hours 33.6	-
				Mililiters	
				Intermittent	

#### **Sensitisation**

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

#### Mutagenicity

No known significant effects or critical hazards.

#### Carcinogenicity

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# **SECTION 11: Toxicological information**

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.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
	Category 3 Category 3		Narcotic effects Narcotic effects

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

Not available.

#### **Aspiration hazard**

Not available.

#### Potential acute health effects

Eye contactInhalationNo known significant effects or critical hazards.

**Skin contact**: May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation : No specific data.

**Skin contact**: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Other information : None identified.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

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

Product/ingredient name	Result	Species	Exposure
iranium 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
pentane-2,4-dione	Acute EC50 75000 μg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia reticulata - Larvae	48 hours
	Acute LC50 47600 μg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
	Acute LC50 60100 μg/l Fresh water	Fish - Bluegill - Lepomis macrochirus	96 hours
l			l

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# **SECTION 12: Ecological information**

decanedioic acid, 1,10-bis	Acute EC50 1.68 mg/l	Algae	96 hours
(1,2,2,6,6-pentamethyl-			
4-piperidinyl) ester, mixt.			
with 1-methyl 10-			
(1,2,2,6,6-pentamethyl-			
4-piperidinyl) decanedioate			
	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.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate 2-methoxy-1-methylethyl	2.3 1.2	-	low low
acetate pentane-2,4-dione	0.68	-	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 Other adverse effects**: No known significant effects or critical hazards.

# **SECTION 13: Disposal considerations**

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

#### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** 

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

#### **Hazardous waste**

: Yes.

## Waste catalogue

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

#### **Packaging**

**Methods of disposal** 

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

Type of packaging	Waste catalogue	
CEPE Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances

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# SECTION 13: Disposal considerations

**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	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	III	III	III	III
14.5 Environmental hazards	No.	Yes.	No.	No.

#### **Additional information**

ADR/RID

: Hazard identification number 30

Tunnel code (D/E)

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

**ADN** 

The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

**IMDG** 

: Emergency schedules F-E, S-E

MDG: Viscous substance. Transport in accordance with 2.3.2.5 of the IMDG Code

(only applicable to receptacles < 450 litre capacity).

user

14.6 Special precautions for : 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 Transport in bulk according to IMO instruments

: Not 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

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# **SECTION 15: Regulatory information**

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**

P<sub>5</sub>c

### **EU regulations**

Industrial emissions : Not listed

(integrated pollution prevention and control) -

**Air** 

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

## **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

assessment

: 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

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

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

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### **SECTION 16: Other information**

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
Skin Sens. 1, H317	On basis of test data Calculation method Calculation method

#### Full text of abbreviated H statements

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very 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**

Acute Tox. 3	ACUTE TOXICITY - Category 3
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 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Carc. 2	CARCINOGENICITY - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN ŤOXICITY - SINGLE EXPOSURE - Category 3

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#### **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.

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