# SAFETY DATA SHEET



# **Hardtop XP II Comp A**

SDS Number: AA00319-0000000419

In accordance with the Standard for Classification and Labeling of Chemical Substance and Safety Data Sheet,
Article 10 Paragraph 1

# Section 1. Chemical product and company identification

A. Product name : Hardtop XP II Comp A

Product code : 53542
Product description : Paint.

B. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** 

Use in coatings - Industrial use

C. Manufacturer : Chokwang Jotun Ltd.

96, Gwahaksandan 1-ro Gangseo-gu, Busan

South Korea

Tel: +82 51 797 6000 Fax: +82 51 711 7735 SDSJotun@jotun.com

**Emergency telephone** 

number

: H.G.LEE Chokwang Jotun Ltd.

Tel: +82 51 797 6000

# Section 2. Hazards identification

A. Hazard classification : FLAMMABLE LIQUIDS - Category 3

SKIN SENSITISATION - Category 1

LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

This product is classified in accordance with the Industrial Safety and Health Act and

the Chemical Control Act.

B. GHS label elements, including precautionary statements

Symbol :





Signal word : Warning.

**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** 

**Prevention**: P280 - Wear protective gloves, protective clothing and eye or face protection.

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

sources. No smoking.

P273 - Avoid release to the environment.

P261 - Avoid breathing vapour.

P272 - Contaminated work clothing should not be allowed out of the workplace.

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# Section 2. Hazards identification

Response : P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water.

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

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

Storage : \$\overline{\pi}403 + P235 - Store in a well-ventilated place. Keep cool.

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

national and international regulations.

C.

Other hazards which do : N

: None known.

not result in classification

identification

# Section 3. Composition/information on ingredients

Substance/mixture : Mixture
Other means of : Not available.

Ingredient name	Common name	Identifiers	%
intanium dioxide	titanium dioxide	CAS: 13463-67-7	≥20 - ≤25
n-butyl acetate	n-butyl acetate	CAS: 123-86-4	≥10 - ≤15
xylene	xylene	CAS: 1330-20-7	<10
ethylbenzene	ethylbenzene	CAS: 100-41-4	≤3
propanoic acid, 3-ethoxy-, ethyl ester	ethyl 3-ethoxy propionate	CAS: 763-69-9	≤3
pentane-2,4-dione	pentane-2,4-dione (acetylacetone)	CAS: 123-54-6	<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	Reaction mass of bis (1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	CAS: 82919-37-7, 41556-26-7	≤0.3
Neodecanoic acid, zinc salt, basic	neodecanoic acid, zinc salt, basic	CAS: 84418-68-8	≤0.3

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 and hence require reporting in this section.

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

# Section 4. First aid measures

A. 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.

**B.** 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.

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# Section 4. First aid measures

#### C. 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.

### **D.** 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.

### E. Notes to physician

: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** 

No specific treatment.

**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.

See toxicological information (Section 11)

# Section 5. Firefighting measures

### A. Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

metal oxide/oxides

# B. Specific hazards arising from the chemical

: 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 thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide

 Special protective equipment for firefighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special precautions 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 6. Accidental release measures

- A. Personal precautions, protective equipment and emergency procedures
- : 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.
- B. 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.
- C. 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 noncombustible, 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.

# Section 7. Handling and storage

A. 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.
- B. 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.

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# Section 8. Exposure controls/personal protection

#### A. Control parameters

**Occupational exposure limits** 

Ingredient name	Exposure limits
n-butyl acetate	Ministry of Employment and Labor
,	(Republic of Korea, 1/2020).
	STEL: 200 ppm 15 minutes.
	TWA: 150 ppm 8 hours.
xylene	Ministry of Employment and Labor
•	(Republic of Korea, 1/2020). [Xylene]
	STEL: 150 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
ethylbenzene	Ministry of Employment and Labor
•	(Republic of Korea, 1/2020).
	STEL: 125 ppm 15 minutes.
	TWA: 100 ppm 8 hours.
pentane-2,4-dione	ACGIH TLV (United States, 7/2023).
•	Absorbed through skin.
	TWA: 25 ppm 8 hours.

# B. 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.

# **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### C. Personal protective equipment

**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.

# Eye protection Hand protection

- : Use safety eyewear designed to protect against splash of liquids.
- : 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.

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

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

May be used, gloves(breakthrough time) 4 - 8 hours: 4H/Silver Shield® (> 0.07 mm), butyl rubber (> 0.4 mm), nitrile rubber (> 0.75 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm), neoprene (> 0.35 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm), neoprene (> 0.35 mm), neo

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

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# Section 8. Exposure controls/personal protection

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.

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.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before

Use chemical-resistant protective suit / disposable overall.

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.

# Section 9. Physical and chemical properties

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

A. Appearance

**Body protection** 

**Physical state** : Liquid.

Colour : Black. Blue. Brown. Clear. Green. Grey. Off-white. Orange. Purple. Red. Violet.

White. Yellow. MCI Base 1 MCI Base 2 MCI Base 3 MCI Base 5 MCI Base 6

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

B. Odour : Characteristic.

C. Odour threshold : Not applicable. D. pH : Not applicable.

E. Melting/freezing point : Not applicable.

133.53°C (272.4°F) boiling point, and boiling range

G. Flash point H. Evaporation rate : Highest known value: 1 (n-butyl acetate) Weighted average: 0.84compared with

butyl acetate

: Closed cup: 32°C

Flammability (solid, gas) : Not applicable.

: Greatest known range: Lower: 1.05% Upper: 9.8% (propanoic acid, 3-ethoxy-, ethyl J. Lower and upper

explosive (flammable) ester)

limits

K. Vapour pressure

F. Boiling point, initial

average: 1.19 kPa (8.93 mm Hg) (at 20°C) Not soluble cold water Solubility

Not soluble hot water

: Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3.88 (Air = M. Vapour density

1)

N. Relative density 1.306 to 1.506 g/cm<sup>3</sup>

O. Partition coefficient: n-: Not available.

P. Auto-ignition temperature

octanol/water

: Lowest known value: 377°C (710.6°F) (propanoic acid, 3-ethoxy-, ethyl ester).

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

: Not available. Q. Decomposition temperature

R. Viscosity : Kinematic (40°C (104°F)): >20.5 mm<sup>2</sup>/s (>20.5 cSt)

Not applicable. S. Molecular weight

: 28.02.2025 Date of revision

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# Section 9. Physical and chemical properties

Particle characteristics

Median particle size : Not applicable.

# Section 10. Stability and reactivity

A. Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

B. Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

C. Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

D. Hazardous : Under normal conditions of storage and use, hazardous decomposition products

decomposition products should not be produced.

# **Section 11. Toxicological information**

There are no data available on the mixture itself. 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. 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. Ingestion may cause nausea, diarrhea and vomiting.

A. Information on likely : Not available.

routes of exposure

#### Potential acute health effects

Inhalation : No known significant effects or critical hazards.Ingestion : No known significant effects or critical hazards.

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

**Eye contact** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

Inhalation: No specific data.Ingestion: No specific data.

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

irritation redness

**Eye contact** : No specific data.

# B. <u>Health hazards</u>

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
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	-
xylene	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	-

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# Section 11. Toxicological information

	LD50 Oral LD50 Oral		3500 mg/kg 3200 mg/kg	-	
ethyl ester	LDG0 Grai	rtat	5200 mg/kg		
pentane-2,4-dione	LD50 Oral	Mouse	951 mg/kg	-	

## **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60	-
				microliters	
propanoic acid, 3-ethoxy-,	Skin - Mild irritant	Rabbit	-	24 hours	-
ethyl ester				500	
				milligrams	
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	
	Oldin Madanaka innikanak	Dalakit		Intermittent	
	Skin - Moderate irritant	Rabbit	-	6 hours 33.6	-
				Mililiters	
				Intermittent	

## **Sensitisation**

Not available.

### **CMR - ISHA Article 42 Occupational Exposure Limits**

Product/ingredient name	Identifiers	Classification
		CARCINOGENICITY - Category 2 CARCINOGENICITY - Category 2

## **Mutagenicity**

**Conclusion/Summary**: No known significant effects or critical hazards.

**Carcinogenicity** 

**Conclusion/Summary**: No known significant effects or critical hazards.

**Classification** 

Product/ingredient name	OSHA	IARC	NTP	ACGIH
ethylbenzene	-	2B		A3

# **Reproductive toxicity**

Not available.

# **Teratogenicity**

**Conclusion/Summary**: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name		Route of exposure	Target organs
n-butyl acetate xylene	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

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# Section 11. Toxicological information

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

### **Aspiration hazard**

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

## Potential chronic health effects

## **Chronic toxicity**

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

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

### **Numerical measures of toxicity**

## **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)
Fardtop XP II Comp A	N/A	13277.3	N/A	105.4	N/A
n-butyl acetate	13100	N/A	N/A	N/A	N/A
xylene	4300	1100	N/A	11	N/A
ethylbenzene	3500	N/A	N/A	11	N/A
propanoic acid, 3-ethoxy-, ethyl ester	3200	N/A	N/A	N/A	N/A
pentane-2,4-dione	500	300	N/A	3	N/A

# **Section 12. Ecological information**

## A. **Ecotoxicity**

This material is harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours
xylene	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
propanoic acid, 3-ethoxy-, ethyl ester	Acute EC50 480 mg/l	Daphnia	48 hours
	Acute LC50 50 mg/l	Fish	96 hours
pentane-2,4-dione	Acute EC50 75000 μg/l Fresh water	Crustaceans - Ceriodaphnia reticulata - Larvae	48 hours
	Acute LC50 47600 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 60100 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt.	Acute EC50 1.68 mg/l	Algae	96 hours

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# **Section 12. Ecological information**

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

### B. Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene	-	-	Readily
ethylbenzene	-	-	Readily

#### C. Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	low
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
propanoic acid, 3-ethoxy-,	1.47	-	low
ethyl ester			
pentane-2,4-dione	0.68	-	low

### D. Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

**E.** Other adverse effects : No known significant effects or critical hazards.

# Section 13. Disposal considerations

### A. Disposal methods

: 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

### **B.** Disposal 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

	<u> </u>		
	UN	IMDG	IATA
A. UN number	UN1263	UN1263	UN1263
B. UN proper shipping name	Paint	Paint	Paint
C. Transport hazard class(es)	3	3	3

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# Section 14. Transport information

D. Packing group	III	III	III
E. Environmental hazards	No.	No.	No.

### **Additional information**

**IMDG** : **Emergency schedules** F-E, S-E ADR/RID : Hazard identification number 30

Special provisions 640E Tunnel code (D/E)

F. Special precautions for

user

: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according

to IMO instruments

Not available.

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

# Section 15. Regulatory information

### A. Regulation according to ISHA

**ISHA** article 117

(Harmful substances prohibited from manufacture)

: None of the components are listed.

**ISHA** article 118 (Harmful substances

: None of the components are listed.

requiring permission) **Article 2 of Youth** 

**Protection Act on Substances Hazardous** 

to Youth

: Not applicable.

### **Exposure Limits of Chemical Substances and Physical Factors**

The following components have an OEL:

n-butvl acetate

xylene

ethylbenzene

pentane-2,4-dione

ISHA Enforcement Regs : None of the components are listed.

Annex 19 (Exposure standards established for harmful factors)

**ISHA Enforcement Regs** Annex 21 (Harmful

factors subject to Work **Environment Measurement)** 

**Annex 22 (Harmful Factors Subject to Special Health Check**up)

The following components are listed: titanium dioxide, n-butyl acetate, xylene, ethyl

benzene

ISHA Enforcement Regs : The following components are listed: Xylene, Ethyl benzene

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# Section 15. Regulatory information

Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control) The following components are listed: titanium dioxide, n-butyl acetate, xylene, ethyl benzene

### B. Regulation according to Chemicals Control Act

**AREC Article 17 (TRI)** 

: The following components are listed: Xylene including o-,m-,p- isomer, Ethylbenzene

**AREC Article 32** 

(Banned)

: None of the components are listed.

Article 19 Subject to authorization (K-Reach

Article 25)

: None of the components are listed.

Article 25)

**AREC Toxic chemicals**: Not applicable

AREC Article 32 (Restricted)

: None of the components are listed.

CCA Article 39 (Accident Precaution

**Chemicals**)

: None of the components are listed.

Existing Chemical Substances Subject to

Registration

: The following components are listed: Xylene, Quartz

C. Dangerous Materials
Safety Management Act

: Class: Class 4 - Flammable Liquid

Item: 4. Class 2 petroleums - Water-insoluble liquid

Designated quantity: 1000 L

Danger category: III

Signal word: Contact with sources of ignition prohibited

D. Wastes regulation

Dispose of contents and container in accordance with all local, regional, national

and international regulations.

### E. Regulation according to other foreign laws

### **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.

# Section 16. Other information

A. References : - Registry of Toxic Effects of Chemical Substances

- United States Environmental Protection Agency ECOTOX

**B. Date of issue** : 25.01.2022 **Date of revision** : 28.02.2025

Date of printing : 28.02.2025

D. Other

C. Version

**▼** Indicates information that has changed from previously issued version.

2.02

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# Section 16. Other information

**Key to abbreviations** 

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available SGG = Segregation Group UN = United Nations

#### **Notice to reader**

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Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.