

### SeaQuantum X200 - 3

### Section 1. Identification

GHS product identifier : SeaQuantum X200 - 3

Other means of identification

: Not available.

Product code : 17300
Product description : Paint.
Product type : Liquid.

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

**Identified uses** 

Use in coatings - Professional use

Supplier's details : Jotun (Singapore) Pte Ltd

37 Tuas View Crescent Singapore 637236 Phone: 6508 8288 Fax: 6265 7484 SDSJotun@jotun.com

**Emergency telephone** 

number

: Jotun (Singapore) Pte Ltd, Tel: 6508 8288

### Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

SKIN SENSITISATION - Category 1

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1

**GHS label elements** 

Hazard pictograms :











Signal word : Danger.

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

H302 + H332 - Harmful if swallowed or if inhaled.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

H373 - May cause damage to organs through prolonged or repeated exposure.

(nervous system)

H410 - Very toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**Date of issue** : 24.01.2023 1/11

### Section 2. Hazards identification

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

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

sources. No smoking.

P273 - Avoid release to the environment.

P260 - Do not breathe vapour.

P270 - Do not eat, drink or smoke when using this product.

Response : P391 - Collect spillage.

P314 - Get medical advice/attention if you feel unwell.

P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

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. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor.

**Storage** P403 + 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.

In compliance : IMO Antifouling System Convention compliant AFS/CONF/26 + IMO MEPC.331(76).

Other hazards which do not : None known.

result in classification

### Section 3. Composition/information on ingredients

Substance/mixture : Mixture Other means of

identification

Not available.

#### CAS number/other identifiers

**CAS** number : Not applicable.

**EC** number : Mixture. : 17300 **Product code** 

Ingredient name	%	CAS number
dicopper oxide	≥25 - ≤50	1317-39-1
xylene	≥10 - ≤15	1330-20-7
ethylbenzene	≤5	100-41-4
zinc oxide	≤5	1314-13-2
colophony	≤3	8050-09-7
hydrocarbons, C9, aromatics	≤3	64742-95-6
copper pyrithione	≤1.7	14915-37-8

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.

**Chemical formula** : Not applicable.

### Section 4. First aid measures

### **Description of necessary first aid measures**

**Eye contact** 

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie,

Date of issue : 24.01.2023 2/11

### Section 4. First aid measures

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

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### Ingestion

: Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye damage.

Inhalation : Harmful if inhaled.

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

Ingestion : Harmful if swallowed.

### Over-exposure signs/symptoms

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

pain watering redness

Inhalation : No specific data.

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

pain or irritation redness

blistering may occur

**Ingestion** : Adverse symptoms may include the following:

stomach pains

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** 

: No specific treatment.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

### Section 5. Firefighting measures

### **Extinguishing media**

Suitable extinguishing media

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

Unsuitable extinguishing

media

: Do not use water jet.

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 very toxic 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.

**Date of issue** : 24.01.2023 3/11

### Section 5. Firefighting measures

**Hazardous thermal** decomposition products : Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides

**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

### Section 6. Accidental release measures

#### 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. Do not breathe 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".

**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. Collect spillage.

#### 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

#### 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 breathe vapour or mist. Do not ingest. 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.

Date of issue : 24.01.2023 4/11

### 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.

# 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. Store locked up. 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.

### Section 8. Exposure controls/personal protection

### **Control parameters**

### Occupational exposure limits

Ingredient name	Exposure limits
dicopper oxide	Workplace Safety and Health Act (Singapore, 2/2006).  PEL (long term): 0.2 mg/m³ 8 hours. Form:
	Fume
xylene	Workplace Safety and Health Act (Singapore, 2/2006).  PEL (short term): 651 mg/m³ 15 minutes.  PEL (short term): 150 ppm 15 minutes.  PEL (long term): 434 mg/m³ 8 hours.  PEL (long term): 100 ppm 8 hours.
ethylbenzene	Workplace Safety and Health Act (Singapore, 2/2006). Notes:  PEL (long term): 100 ppm 8 hours.  PEL (long term): 434 mg/m³ 8 hours.  Workplace Safety and Health Act (Singapore, 2/2006).  PEL (short term): 543 mg/m³ 15 minutes.
colophony	PEL (short term): 125 ppm 15 minutes.  ACGIH TLV (United States, 1/2022). Skin sensitiser. Inhalation sensitiser.  TWA: 0.001 mg/m³, (as total Resin acids) 8 hours. Form: Inhalable fraction

# 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.

#### **Individual protection measures**

### **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.

**Date of issue** : 24.01.2023 5/11

### Section 8. Exposure controls/personal protection

#### **Eye/face protection**

: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### **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.

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

Not recommended, gloves(breakthrough time) < 1 hour: neoprene, butyl rubber,

Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber, 4H, Teflon, polyvinyl alcohol (PVA)

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**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

### Section 9. Physical and chemical properties

### **Appearance**

Physical state : Liquid.
Colour : Red

Odour : Characteristic.
Odour threshold : Not available.
pH : Not applicable.
Melting point : Not applicable.

**Boiling point** : Lowest known value: 136.1°C (277°F) (ethylbenzene). Weighted average: 140.91°C (285.6°F)

Flash point : Closed cup: 25°C (77°F)

Burning time : Not applicable.

Burning rate : Not applicable.

**Evaporation rate** : Highest known value: 0.84 (ethylbenzene) Weighted average: 0.79compared with butyl acetate

**Date of issue** : 24.01.2023 6/11

### Section 9. Physical and chemical properties

Flammability (solid, gas)

Lower and upper explosive (flammable) limits

: 0.8 - 7.6%

: Not applicable.

Vapour pressure

: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted

average: 0.89 kPa (6.68 mm Hg) (at 20°C)

Vapour density

: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)

**Relative density** 

: 1.935 g/cm<sup>3</sup>

**Solubility** 

Insoluble in the following materials: cold water and hot water.

Solubility in water Partition coefficient: n: Not available.

octanol/water

: Not available.

**Auto-ignition temperature Decomposition temperature**  : Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics).

: Not available. : Not available.

**SADT Viscosity** 

: Dynamic: Highest known value: 0.58 cP (xylene)

Kinematic: Highest known value: 0.77 cSt (ethylbenzene) (OECD 114)

Kinematic (40C): >20.5 cSt

### Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

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

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.

Incompatible materials

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

oxidising agents, strong alkalis, strong acids.

**Hazardous decomposition** 

products

**SADT** 

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Not available.

### Section 11. Toxicological information

#### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
dicopper oxide	LC50 Inhalation Dusts and mists	Rat	3.34 mg/l	4 hours
	LD50 Oral	Rat	1340 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
-	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
·	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
copper pyrithione	LC50 Inhalation Dusts and mists	Rat	70 mg/m³	4 hours
	LD50 Dermal	Rabbit	300 mg/kg	-
	LD50 Oral	Rat	200 mg/kg	-

### **Irritation/Corrosion**

Result	Species	Score	Exposure	Observation
Eyes - Cornea opacity	Rabbit	-	72 hours	-
Eyes - Redness of the conjunctivae	Rabbit	-	48 hours	-
Eyes - Mild irritant	Rabbit	-	87 milligrams	-
Skin - Mild irritant	Rat	-	8 hours 60	-
			microliters	
Eyes - Mild irritant	Rabbit	-	24 hours 500	-
			mg	
	Eyes - Cornea opacity Eyes - Redness of the conjunctivae Eyes - Mild irritant Skin - Mild irritant	Eyes - Cornea opacity Eyes - Redness of the conjunctivae Eyes - Mild irritant Skin - Mild irritant Rabbit Rabbit Rabbit Rabbit	Eyes - Cornea opacity Eyes - Redness of the conjunctivae Eyes - Mild irritant Skin - Mild irritant Rabbit - Rabbit - Rabbit - Rat	Eyes - Cornea opacity Eyes - Redness of the conjunctivae Eyes - Mild irritant Skin - Mild irritant Eyes - Mild irritant Rabbit Rabbit Rat Rabbit Rat Rabbit - 87 milligrams 8 hours 60 microliters Eyes - Mild irritant Rabbit - 24 hours 500

Date of issue 7/11 : 24.01.2023

# **Section 11. Toxicological information**

	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
copper pyrithione	Eyes - Severe irritant	Mammal -	-	-	-
		species			
		unspecified			
	Skin - Irritant	Mammal -	-	-	-
		species			
		unspecified			

### **Sensitisation**

3	Route of exposure	Species	Result
colophony	skin	Mammal - species unspecified	Sensitising

#### **Mutagenicity**

Not available.

### **Carcinogenicity**

Not available.

### **Reproductive toxicity**

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
copper pyrithione	-	-		unspecified	Route of exposure unreported	-

### **Teratogenicity**

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
hydrocarbons, C9, aromatics	Category 3	-	Respiratory tract irritation
copper pyrithione	Category 3 Category 3	-	Narcotic effects Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethylbenzene copper pyrithione	Category 2 Category 1		hearing organs nervous system

### **Aspiration hazard**

Name	Result
ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes : Not available.

of exposure

### Potential acute health effects

**Eye contact** : Causes serious eye damage.

: Harmful if inhaled. Inhalation

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

Ingestion : Harmful if swallowed.

### Symptoms related to the physical, chemical and toxicological characteristics

Date of issue : 24.01.2023 8/11

### **Section 11. Toxicological information**

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

pain watering redness

Inhalation : No specific data.

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

pain or irritation

redness

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: May cause damage to organs through prolonged or repeated exposure. 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.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

#### **Numerical measures of toxicity**

### **Acute toxicity estimates**

Route	ATE value
Oral	929.71 mg/kg
Dermal	5556.4 mg/kg
Inhalation (vapours)	104.13 mg/l
Inhalation (dusts and mists)	2.66 mg/l

# Section 12. Ecological information

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
dicopper oxide	Acute LC50 0.075 mg/l Fresh water	Fish - Danio rerio	96 hours
	Chronic NOEC 0.001 mg/l	Algae	-
	Chronic NOEC 0.0052 mg/l	Algae	-
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
zinc oxide	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.02 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential	72 hours
hudroserbone CO eremetica	Acuto FCF0 <10 mg/l	growth phase	48 hours
hydrocarbons, C9, aromatics		Daphnia	
	Acute IC50 <10 mg/l	Algae	72 hours

**Date of issue** : 24.01.2023 9/11

### **Section 12. Ecological information**

Acute LC50 <10 mg/l	Fish	96 hours
Acute EC50 0.022 mg/l	Daphnia	48 hours
Acute IC50 0.035 mg/l	Algae	120 hours
Acute LC50 0.0043 mg/l	Fish	96 hours
Chronic NOEC 0.00046 mg/l	Algae - Skeletonema costatum	120 hours
	Acute EC50 0.022 mg/l	Acute EC50 0.022 mg/l Acute IC50 0.035 mg/l Acute LC50 0.0043 mg/l  Acute LC50 0.0043 mg/l  Acute EC50 0.0043 mg/l  Algae  Fish

#### Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
dicopper oxide	-	-	Not readily
xylene	-	-	Readily
ethylbenzene	-	-	Readily
zinc oxide	-	-	Not readily
hydrocarbons, C9, aromatics	-	-	Not readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
zinc oxide	-	28960	high
colophony	1.9 to 7.7	-	high
hydrocarbons, C9, aromatics	-	10 to 2500	high

#### **Mobility in soil**

Soil/water partition coefficient (K<sub>oc</sub>)

: Not available.

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

### Section 13. Disposal considerations

#### **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. 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.

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

### **Section 14. Transport information**

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	Paint	Paint. Marine pollutant (dicopper oxide)	Paint
Transport hazard class(es)	3	3	3
Packing group	III	III	III

**Date of issue** : 24.01.2023 10/11

### **Section 14. Transport information**

Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	-	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.  Emergency schedules F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

#### **Additional information**

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

**ADR / RID** : Tunnel restriction code: (D/E)

Hazard identification number: 30

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 : Not available.

to IMO instruments

### Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

### 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)

UN = United Nations

References

Not available.

Indicates information that has changed from previously issued version.

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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.

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