SAFETY DATA SHEET

Notorius Concentrate

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	07.01.2020
Revision date	07.01.2020

1.1. Product identifier

Product name	Notorius Concentrate

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

Use of the substance / preparation	Antifouling paint for fish nets (P21).
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Company name	Brynsløkken AS
Office address	Delitoppen 3
Postcode	1540
City	Vestby
Country	Norway
Telephone number	+47 64909910
Email	post@brynslokken.no
Website	http://www.brynslokken.no/
Enterprise No.	887 308 462
Contact person	Mia Tiller Mjøs

1.4. Emergency telephone number

Emergency telephone	Telephone number: 112/ +47 22 59 13 00 Description: Organisasjon/Firma: Giftinformasjonen / Directorate of Health and Social Affairs Emergency Service 24H

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Dam. 1; H318 Acute Tox. 4; H302 Acute Tox. 4; H332 Aquatic Acute 1; H400 Aquatic Chronic 1; H410

2.2. Label elements

Hazard pictograms (CLP)

Composition on the label	Dicopper oxide, Copper (I) oxide, Bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper
Signal word	Danger
Hazard statements	H318 Causes serious eye damage. H302 + H332 Harmful if swallowed or if inhaled. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or doctor / physician. P501 Dispose of contents / container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Other hazards

PBT / vPvB	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents	Notes
Dicopper oxide, Copper (I) oxide	CAS No.: 1317-39-1 EC No.: 215-270-7 Index No.: 029-002-00-X REACH Reg. No.: 01211951379436	Acute Tox. 4; H302 Acute Tox. 4; H332 Eye Dam. 1; H318 Acute Tox. 1; H400 Aquatic Chronic 1; H410	10 - 30 %	
Bis(1-hydroxy-1H-pyridine-2-thionato-O, S) copper	CAS No.: 14915-37-8 EC No.: 238-984-0	Acute Tox. 4; H302 Acute Tox. 2; H330 Eye Dam. 1; H318 Acute Tox. 1; H400 Aquatic Chronic 1;	< 5 %	

	H410; M-factor M=100

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Do not give victim anything to drink if he is unconscious.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.
Skin contact	Immediately remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if any discomfort continues. If eye irritation persists: Get medical advice/attention.
Ingestion	Immediately rinse mouth and drink plenty of water. Keep person under observation. Seek hospital and bring these instructions. Do NOT induce vomiting.

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

General symptoms and effects	Dangerous if innhaled. Dangerous if swallowed. Can give serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment	Call a POISON CENTER or doctor/physician if you feel unwell.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Foam, carbon dioxide or dry powder. Water spray. Sand.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Not flammable according to national regulations concering flammable goods.
Hazardous combustion products	Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Fire fighting procedures	Use water to keep fire exposed containers cool and disperse vapours. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Special protective equipment for firefighters	Do not enter the fire area without sufficient protection wear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Avoid contact with skin and eyes. Ensure adequate ventilation, especially in

	confined areas. Do not breathe vapour.
Protective equipment	Equip cleanup crew with proper protection. Wear appropriate personal protective equipment according to section 8.
Emergency procedures	Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautionary measures	Discharge into rivers and drains is forbidden. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Clean up	Soak up spills with iners solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.

6.4. Reference to other sections

Other instructions	Waste is treated according to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Use personal protective equipment as required. Avoid contact with skin and eyes. Provide good ventilation in process area to prevent formation of vapour. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking, and when leaving work.

Protective safety measures

Advice on general occupational hygiene	Wash hands and forearms thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in a cool and well-ventilated place. Protect against direct sunlight. Storage temperature: 0 - 30 °C
Conditions to avoid	Refer to section 10 regarding incompatible materials.

7.3. Specific end use(s)

Recommendations	Professional use only.

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Control parameters comments	No additional information available.

8.2. Exposure controls

Safety signs

Precautionary measures to prevent exposure

Appropriate engineering controls	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Establish eyewash station.

Eye / face protection

Required Properties	Wear approved, tight fitting safety glasses where splashing is probable. Standard EN 166.

Hand protection

Suitable gloves type	Wear protective gloves. Neoprene, nitrile, polyethylene or PVC. Use protective gloves according to standard NF EN 374. Breakthrough time > 480 min. Thickness of the material should be 0,2 - 0,4 mm.

Skin protection

Suitable protective clothing	Wear suitable protective clothing as protection against splashing or contamination.

Respiratory protection

Respiratory protection necessary at	In case of inadequate ventilation wear respiratory protection. High-efficiency particulate respirator. Gas mask with filter type A. Standard EN 149.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
State under standard conditions	Liquid.
Colour	Brownish.
Odour	Characteristic.
Melting point / melting range	Value: ~ 0 °C
Freezing point	Value: ~ 0 °C
Boiling point / boiling range	Value: ~ 100 °C
Flash point	Comments: No data recorded.
Vapour pressure	Comments: No data recorded.
Density	Value: 1,2 g/cm³
Solubility	Comments: 100 % soluble in water.
Explosive properties	No explosive properties.

Oxidising properties	No oxidizing properties.

9.2. Other information

Physical hazards

Redox potential	Comments: No data recorded.

Other physical and chemical properties

Comments	No data recorded.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stability	Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No dangerous reactions known under normal condition of use.

10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid	Strong oxidising substances. Iron. Strong acids and strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products	Stable under normal temperature conditions and recommended use. During fire, toxic gases (CO, CO2) are formed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Comments: Dangerous if swallowed. May cause serious eye damage.
Substance	Dicopper oxide, Copper (I) oxide
Acute toxicity	**Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 400 mg/kg **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LD50 **Route of exposure:** Dermal

	Value: > 2000 mg/kg **Animal test species:** Rat **Type of toxicity:** Acute **Effect tested:** LC50 **Route of exposure:** Inhalation. **Value:** 3340 mg/m³ **Animal test species:** Rat
Substance	Bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper
Acute toxicity	**Effect tested:** LC50 **Route of exposure:** Inhalation. **Value:** 0.07 mg/l **Animal test species:** Rat **Effect tested:** LD50 **Route of exposure:** Dermal **Value:** > 2000 mg/kg **Animal test species:** Rabbit **Effect tested:** LD50 **Route of exposure:** Oral **Value:** 1075 mg/kg **Animal test species:** Rat

Other information regarding health hazards

Specific target organ toxicity - repeated exposure, human experience	På grunnlag av tilgjengelige data, er ikke klassifiseringskriteriene tilfredsstilt.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Dicopper oxide, Copper (I) oxide
Aquatic toxicity, fish	**Value:** > 0.173 mg/l **Species:** Cyprinodon variegatus
Substance	Bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper
Aquatic toxicity, fish	**Value:** 0.0043 ppm **Effect dose concentration :** LC50
Substance	Dicopper oxide, Copper (I) oxide
Aquatic toxicity, algae	**Value:** 65 mg/l **Effect dose concentration :** IC50 **Species:** 72 hours - Scenedesmus subspicatus
Substance	Dicopper oxide, Copper (I) oxide
Aquatic toxicity, crustacean	**Value:** 0.51 mg/l **Effect dose concentration :** EC50 **Species:** 48 hours - Daphnia magna
Substance	Bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper

Aquatic toxicity, crustacean	**Value:** 0.022 mg/l **Effect dose concentration :** EC50

12.2. Persistence and degradability

Persistence and degradability description/evaluation	This product may cause long term adverse effects in the aquatic environment.

12.3. Bioaccumulative potential

Bioaccumulation, evaluation	This product will not bioaccumulate.

12.4. Mobility in soil

Mobility	No data recorded.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII. This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Other adverse effects

Additional ecological information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate methods of disposal for the chemical	Confirm disposal procedures with environmental engineer and local regulations.
Appropriate methods of disposal for the contaminated packaging	Collect in marked containers and deliver to approved depot.
National regulations	Dispose of contents/container to a hazardous or special waste collection point.
Other information	Avoid release to the environment.

SECTION 14: Transport information

Dangerous goods	Yes

14.1. UN number

ADR/RID/ADN	3082
IMDG	3082
ICAO/IATA	3082

14.2. UN proper shipping name

Proper shipping name English ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO/IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR/RID/ADN	9
Classificaton code ADR/RID/ADN	M6
IMDG	9
ICAO/IATA	9

14.4. Packing group

ADR/RID/ADN	III
IMDG	III
ICAO/IATA	III

14.5. Environmental hazards

IMDG Marine pollutant	Ja

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Product name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Additional information

Hazard label ADR/RID/ADN	9
Hazard label IMDG	9
Hazard label ICAO/IATA	9

ADR/RID Other information

Tunnel restriction code	-
Transport category	3
Hazard No.	90
Other applicable information ADR/RID	90

IMDG Other information

EmS	F-A, S-F

SECTION 15: Regulatory information

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

EEC-directive	Contains no REACH substances restricted by Annex XVII.
National regulations	EC-regulation 2015/830/EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

Chemical safety assessment performed	No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H302 Harmful if swallowed. H318 Causes serious eye damage. H330 Fatal if inhaled. H332 Harmful if inhaled. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.
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