



Safety Data Sheet Notorius Concentrate

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : Notorius Concentrate

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

Relevant identified uses

Main use category : Professional use
Use of the substance/mixture : Concentrate
Function or use category : Antifouling for fishnets.

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Brynsløkken AS
Hestehagen 1,
1440 Drøbak , Norge - Norway
T +47 64909910 - F +47 64909911
post@brynslokken.no

Manufacturer

Brynsløkken AS
Hestehagen 1,
1440 Drøbak , Norge - Norway
T +47 64909910 - F +47 64909911
post@brynslokken.no

Contact person : Vebjørn Ohnstad (vebjorn@brynslokken.no)

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
Norway	Giftinformasjonen Directorate of Health and Social Affairs	P.O. Box 7000, St. Olavs Plass 0130 Oslo	112/ +47 22 59 13 00

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Inhalation:dust,mist) H332
Eye Dam. 1 H318
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Danger
Hazardous ingredients : dicopper oxide, copper (I) oxide; bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper
Hazard statements (CLP) : H302+H332 - Harmful if swallowed or if inhaled
H318 - Causes serious eye damage.
H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements (CLP) : P280 - Wear protective gloves, eye 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/doctor

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

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

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
dicopper oxide, copper (I) oxide	(CAS-No.) 1317-39-1 (EC-No.) 215-270-7 (EC Index-No.) 029-002-00-X (REACH-no) 01-2119513794-36	10 - 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M=100)
bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper	(CAS-No.) 14915-37-8 (EC-No.) 238-984-0 (REACH-no) N/A	< 5	Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Inhalation:dust,mist), H330 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 (M=100)

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Drink a few glasses of water or milk. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: May cause skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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

No specific measures identified.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Not flammable according to national regulations concerning flammable goods.
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO2). Cupric oxide.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper personal protective equipment, including respiratory protection.

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.

For non-emergency personnel

- Protective equipment : Wear appropriate personal protective equipment - see Section 8. Avoid inhalation of vapours and aerosol spray.
- Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Discharging 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

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.

6.4. Reference to other sections

See section 13 for waste handling. See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Precautions for safe handling : Use personal protective equipment as required. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. 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.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Store in original container. Keep container tightly closed. Keep container closed when not in use.
- Incompatible materials : Refer to Section 10 on Incompatible Materials.
- Storage temperature : 0 - 30 °C

7.3. Specific end use(s)

For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Provide eyewash station.
- Personal protective equipment : Gloves. Safety glasses. High gas/vapour concentration: gas mask with filter type A.
- Hand protection : Wear suitable gloves. PVC gloves. Layer thickness : 0,2 - 0,4 mm. Breakthrough time : > 480min. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374
- Eye protection : Wear approved safety goggles. STANDARD EN 166.
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : High gas/vapour concentration: gas mask with filter type A. Standard EN 149.



Environmental exposure controls	: Avoid release to the environment.
Other information	: Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment. Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: No data available
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: ≈ 0 °C
Freezing point	: ≈ 0 °C
Boiling point	: ≈ 100 °C
Flash point	: Not applicable.
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: N/A
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water. Water: 100 %
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not explosive.
Oxidising properties	: Non flammable.
Explosive limits	: No data available

9.2. Other information

Additional information	: No information.
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agent. Iron. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Stable under normal temperature conditions and recommended use.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:dust,mist: Harmful if inhaled.

ATE CLP (oral)	1546.7625899281 mg/kg bodyweight
ATE CLP (dust,mist)	1.09375 mg/l/4h
dicopper oxide, copper (I) oxide (1317-39-1)	
LD50 oral rat	400 mg/kg
LD50 dermal rat	> 2000 mg/kg

dicopper oxide, copper (I) oxide (1317-39-1)	
LC50 inhalation rat (mg/l)	3340 mg/m³
bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper (14915-37-8)	
LD50 oral rat	1075 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	0.07 mg/l/4h
Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

dicopper oxide, copper (I) oxide (1317-39-1)	
LC50 fish 1	> 0.173 mg/l (Cyprinodon variegatus)
EC50 Daphnia 1	0.51 mg/l (48 hours - Daphnia magna)
IC50 algae	65 mg/l 72 hours - Scenedesmus subspicatus
bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper (14915-37-8)	
LC50 fish 1	0.0043 ppm
EC50 Daphnia 1	0.022 mg/l (48 hours -Daphnia magna Straus)

12.2. Persistence and degradability

Notorius Concentrate	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Notorius Concentrate	
Bioaccumulative potential	No bioaccumulation data available.
bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper (14915-37-8)	
Bioconcentration factor (BCF REACH)	50

12.4. Mobility in soil

Notorius Concentrate	
Ecology - soil	No data available.

12.5. Results of PBT and vPvB assessment

Notorius Concentrate	
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

Other adverse effects : None to our knowledge.
 Additional information : Avoid release to the environment.





SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Regional legislation (waste) : Disposal must be done according to official regulations.
- Waste treatment methods : Collect in marked containers and deliver to approved depot.
- Product/Packaging disposal recommendations : Dispose of contents/container to a hazardous or special waste collection point.
- Ecology - waste materials : Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
3082	3082	3082	3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, n.o.s.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, (E)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III, MARINE POLLUTANT		
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available			

14.6. Special precautions for user

- Overland transport

- Classification code (ADR) : M6
- Special provisions (ADR) : 274, 335, 601, 375
- Limited quantities (ADR) : 5I
- Excepted quantities (ADR) : E1
- Packing instructions (ADR) : P001, IBC03, LP01, R001
- Special packing provisions (ADR) : PP1
- Mixed packing provisions (ADR) : MP19
- Portable tank and bulk container instructions (ADR) : T4
- Portable tank and bulk container special provisions (ADR) : TP1, TP29
- Tank code (ADR) : LGBV
- Vehicle for tank carriage : AT
- Transport category (ADR) : 3
- Special provisions for carriage - Packages (ADR) : V12
- Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
- Hazard identification number (Kemler No.) : 90
- Orange plates :



- Tunnel restriction code (ADR) : E

- Transport by sea

Special provisions (IMDG) : 274, 335, 969
 Limited quantities (IMDG) : 5 L
 Excepted quantities (IMDG) : E1
 Packing instructions (IMDG) : P001, LP01
 Special packing provisions (IMDG) : PP1
 IBC packing instructions (IMDG) : IBC03
 Tank instructions (IMDG) : T4
 Tank special provisions (IMDG) : TP2, TP29
 EmS-No. (Fire) : F-A
 EmS-No. (Spillage) : S-F
 Stowage category (IMDG) : A
 Flash point (IMDG) : -

- Air transport

PCA Excepted quantities (IATA) : E1
 PCA Limited quantities (IATA) : Y964
 PCA limited quantity max net quantity (IATA) : 30kgG
 PCA packing instructions (IATA) : 964
 PCA max net quantity (IATA) : 450L
 CAO packing instructions (IATA) : 964
 CAO max net quantity (IATA) : 450L
 Special provisions (IATA) : A97, A158, A197
 ERG code (IATA) : 9L

Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

EU-Regulations

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list
 Contains no REACH Annex XIV substances

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

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Indication of changes:

Hazards identification.

2	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
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Data sources : Classification according to Regulation (EC) No. 1272/2008 [CLP]. 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.

Other information : None.
 Date of issue : 17/12/2015
 Revision date : 01/10/2017
 Supersedes : 08/05/2017
 Version : 3.0
 Signature : K. Dyreskog

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
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.

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.