

SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008
(All references to EU regulations and directives are abbreviated into only the numeric term)
Revision date 2021-12-22
Replaces SDS issued 2021-03-08
Version number 6.0



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

1.1. Product identifier

Trade name Extinguishant -35°C
Article number 1891, 1831, 1831-200, 1831-1000

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

Identified uses Fire extinguishing agents

1.3. Details of the supplier of the safety data sheet

Company Fogmaker International AB
Box 8005
35008 VÄXJÖ
Sweden
Telephone +46 470-77 22 00
E-mail info@fogmaker.com

1.4. Emergency telephone number

Phone number for emergencies: 999 or 112. The numbers are available 24/7.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Upon assessment, this mixture is not classified as hazardous according to 1272/2008

2.2. Label elements

Hazard pictogram Not applicable
Signal word Not applicable
Hazard statement Not applicable

Supplemental hazard information

EUH210 Safety data sheet available on request.

2.3. Other hazards

Not indicated.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

| Constituent | Classification | Concentration |
|---|-------------------------------------|---------------|
| ETHYLENE GLYCOL | | |
| CAS No: 107-21-1 EC No: 203-473-3 Index No: 603-027-00-1 REACH: 01-2119456816-28 | Acute Tox. 4, STOT RE 2; H302, H373 | <0.15 % |

| 2-(2-BUTOXYETHOXY)ETHANOL | | |
|---|---|---------|
| CAS No: 112-34-5 EC No: 203-961-6 Index No: 603-096-00-8 REACH: 01-2119475104-44 | Eye Irrit. 2; H319 | <0.15 % |
| COCAMIDOPROPYL BETAINE | | |
| CAS No: 147170-44-3 EC No: 931-333-8 REACH: 01-2119552480-44 | Eye Dam. 1, Aquatic Chronic 3; H318, H412 | <0.15 % |
| N-(3-(DIMETHYLAMINO)PROPYL)-3,3,4,4,5,5,6,6,7,7,8,8,8-TRIDECAFLUOROOCCTANESULPHONAMIDE N-OXIDE | | |
| CAS No: 80475-32-7 EC No: 279-481-6 | Eye Irrit. 2, Aquatic Chronic 2; H319, H411 | <0.15 % |

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

SECTION 4: First aid measures

4.1. Description of first aid measures

Generally

In case of concern, or if symptoms persist, call a doctor/physician.

Upon breathing in

Move casualty to fresh air and rinse nose, mouth and throat with water.

Upon eye contact

Remove contact lenses immediately if possible.

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor/ophthalmologist.

Upon skin contact

Remove contaminated clothes.

Wash the skin with soap and water.

If symptoms occur, contact a physician.

Upon ingestion

Rinse nose, mouth and throat with water.

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

No further relevant information available.

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

Symptomatic treatment.

When contacting a physician, take this SDS with you.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Not applicable: the product is a fire extinguisher.

Extinguish with materials intended for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

The product is not hazardous in the flammable sense.

In case of fire, substances hazardous to health, or substances harmful in other respects, may be dispersed.

5.3. Advice for firefighters

In case of fire use proper breathing apparatus.

Protective measures should be taken regarding other material at the site of the fire.

Wear full protective clothing.

Contain and collect extinguishing liquid.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not inhale the product and avoid exposure to skin and eyes.
Use suitable allergy-tested protective gloves when cleaning up.

6.2. Environmental precautions

At amounts considered in this case, the product may be released into the natural environment without serious environmental consequences. Large emissions should however be reported to the emergency services and the Environment Agency.

6.3. Methods and material for containment and cleaning up

To be collected with caution and transported to a waste disposal facility.
Rinse area thoroughly with water.

6.4. Reference to other sections

Contaminated products should be treated as chemical waste and declared as non-hazardous goods.
See section 8 and 13 for personal protection equipment and disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Store this product separately from food items and keep it out of the reach of children and pets.
Handle in premises which have modern ventilation standards.
Do not eat, drink or smoke in premises where this product is handled.
The usual precautions for handling chemicals should be observed.
Wash your hands after using the product.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated area, not above eye-level.
Store only in the original package.
Store at 5 - 30 °C.

7.3. Specific end use(s)

See identified uses in Section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National limit values

ETHYLENE GLYCOL

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 10 mg/m³
Time-weighted-average exposure limit (TWA) 20 ppm (Vapour) / 52 mg/m³ (Vapour)
Short term exposure limit (STEL) 40 ppm (Vapour) / 104 mg/m³ (Vapour)
Note Sk,Sk

2-(2-BUTOXYETHOXY)ETHANOL

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 10 ppm / 67.5 mg/m³
Short term exposure limit (STEL) 15 ppm / 101.2 mg/m³
Note

Explanations of abbreviations are given in Section 16b

DNEL**2-(2-BUTOXYETHOXY)ETHANOL**

| | Type of exposure | Route of exposure | Value |
|----------|---------------------|-------------------|-------------------------|
| Worker | Acute Local | Inhalation | 101.2 mg/m ³ |
| Consumer | Chronic Systemic | Inhalation | 34 mg/m ³ |
| Worker | Chronic Systemic | Dermal | 20 mg/kg bw/d |
| Worker | Chronic Local | Inhalation | 67.5 mg/m ³ |
| Worker | Chronic Systemic | Inhalation | 67.5 mg/m ³ |
| Consumer | Acute Local | Inhalation | 50.6 mg/m ³ |
| Consumer | Acute Systemic | Oral | 1.25 mg/kg |
| Consumer | Chronic Local | Inhalation | 34 mg/m ³ |
| Consumer | Chronic Systemic | Oral | 5 mg/kg bw |
| Consumer | Chronic Systemic | Dermal | 10 mg/kg bw/d |

COCAMIDOPROPYL BETAINE

| | Type of exposure | Route of exposure | Value |
|----------|---------------------|-------------------|----------------------|
| Worker | Chronic Systemic | Dermal | 12.5 mg/kg bw |
| Worker | Chronic Systemic | Inhalation | 44 mg/m ³ |
| Consumer | Chronic Systemic | Oral | 7.5 mg/kg bw |
| Consumer | Chronic Systemic | Dermal | 7.5 mg/kg bw |

PNEC**2-(2-BUTOXYETHOXY)ETHANOL**

| | |
|------------------------------------|------------|
| Environmental protection target | PNEC value |
| Fresh water | 1 mg/l |
| Freshwater sediments | 4 mg/kg |
| Marine water | 0.1 mg/l |
| Marine sediments | 0.4 mg/kg |
| Food chain | 56 mg/kg |
| Microorganisms in sewage treatment | 200 mg/l |
| Soil (agricultural) | 0.4 mg/kg |

COCAMIDOPROPYL BETAINE

| | |
|------------------------------------|--------------|
| Environmental protection target | PNEC value |
| Fresh water | 0.0135 mg/L |
| Freshwater sediments | 1 mg/kg dw |
| Marine sediments | 0.1 mg/kg dw |
| Microorganisms in sewage treatment | 3000 mg/L |
| Soil (agricultural) | 0.8 mg/kg dw |

8.2. Exposure controls

In terms of minimizing risks, no special attention is needed for this product besides the general obligations that follow EU directive 89/391 and national occupational legislation.

8.2.1. Appropriate engineering controls

Maintenance and service of personal protective equipment shall be included in the works plan for internal supervision. All inspections and remedial measures shall be documented.

Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

Skin protection

Special measures for protection of the skin are necessary only in rare working situations. In case of doubt, consult occupational expertise. Show this safety data sheet.

Normal working-clothes of cotton or synthetic material should be adequate. Clothing contaminated with this product should be washed immediately; avoid contact with the skin.

Protective gloves are normally not needed due to the properties of this product, but may be necessary for other reasons, e.g. mechanical risks, temperature conditions or microbiological risks.

Respiratory protection

Protective breathing equipment should only be required in extreme work-situations. Consult the manufacturer if this is the case.

Dust filter IIB (P2) may be required.

8.2.3. Environmental exposure controls

For limitation of environmental exposure, see Section 12.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|------------------------------|
| (a) Physical state | liquid |
| | Form: liquid |
| (b) Colour | Not indicated |
| (c) Odour | Not indicated |
| (d) Melting point/freezing point | -35 °C |
| (e) Boiling point or initial boiling point and boiling range | 109 °C |
| (f) Flammability | Not indicated |
| (g) Lower and upper explosion limit | Not indicated |
| (h) Flash point | Not indicated |
| (i) Auto-ignition temperature | Not indicated |
| (j) Decomposition temperature | Not indicated |
| (k) pH | When supplied, pH is: 7 - 9 |
| (l) Kinematic viscosity | Not indicated |
| (m) Solubility | Solubility in water: Soluble |
| (n) Partition coefficient n-octanol/water (log value) | Not indicated |
| (o) Vapour pressure | Not indicated |
| (p) Density and/or relative density | Not indicated |
| (q) Relative vapour density | Not indicated |
| (r) Particle characteristics | Not indicated |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Not indicated

9.2.2. Other safety characteristics

Not indicated

SECTION 10: Stability and reactivity

10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

10.2. Chemical stability

The product is stable at normal storage and handling conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions known.

10.4. Conditions to avoid

Protect from heat.

10.5. Incompatible materials

Avoid contact with zinc and galvanized materials.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

The product is not classified as toxic.

Acute toxicity

The product is not classified as acutely toxic.

2-(2-BUTOXYETHOXY)ETHANOL

LD50 rabbit 24h: 2700 Dermal

LD50 Mouse 24h: 6050 mg/kg Orally

LD50 rabbit 24h: 2700 mg/kg Orally

LD50 rat 24h: 6600 mg/kg Orally

Skin corrosion/irritation

The mixture is judged as a whole and is classified to be neither corrosive nor irritant to skin. Mild irritation may occur on prolonged or repeated exposure.

Serious eye damage/irritation

The mixture is judged as a whole and is classified to be neither corrosive nor irritant to the eyes. Mild irritation may occur on prolonged or repeated exposure.

Respiratory or skin sensitisation

Hypersensitive reactions cannot be ruled out for persons who are overtly sensitive.

The criteria for classification cannot be considered fulfilled based on available data.

Germ cell mutagenicity

The product is not classified as mutagen.

Carcinogenicity

The product is not classified as carcinogenic.

Reproductive toxicity

The product is not classified as a reproductive toxicant.

STOT-single exposure

No known hazards for occasional exposure.

STOT-repeated exposure

No known hazards for repeated exposure.

Aspiration hazard

The product is not classified as being toxic for aspiration.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Not indicated.

11.2.2. Other information

Not indicated.

SECTION 12: Ecological information

12.1. Toxicity

This product consists of easily degradable naturally occurring or nature identical substances, mainly obtained from renewable sources, whereby the global environmental load may be considered to be negligible. In the local environment minor ecological effects may occur in case of large discharge.

Prevent release on land, in water and drains.

ETHYLENE GLYCOL

LC50 fathead minnow (*Pimephales promelas*) 96h: 72860 mg/l

EC50 Algae 96h: 6500 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 48 h: 100 mg/l

2-(2-BUTOXYETHOXY)ETHANOL

EC50 Algae 96h: 1101 mg/l

LC50 Bluegill (*Lepomis macrochirus*) 96h: 1300 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 48 h: > 1000 mg/l

EC50 Algae 72 h: > 1000 mg/l

LC50 Fish 96h: 2700 mg/l

COCAMIDOPROPYL BETAINE

EC50 Freshwater water flea (*Daphnia magna*) 48 h: 1 - 2 mg/l

EC50 Algae 72 h: 1 - 2 mg/l

LC50 Fish 96h: 1 - 2 mg/l

12.2. Persistence and degradability

The product degrades in the natural environment.

12.3. Bioaccumulative potential

Neither this product, nor its contents, accumulates in nature.

12.4. Mobility in soil

No information about mobility in the nature exists but there is no reason to suppose the product to be ecologically harmful because of this.

12.5. Results of PBT and vPvB assessment

No chemical safety report has been prepared.

12.6. Endocrine disrupting properties

Not indicated.

12.7. Other adverse effects

This product degrades rapidly but large emission within a short period of time may be harmful to the local environment.

The components of the product have a fertilising effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

The product is not classified as hazardous waste.

This product is not usually recycled.

Avoid discharge into sewers.

Combustion is a suitable method for final disposal of this waste product.

Also take local regulations for dealing with waste into account.

See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

14.1. UN number or ID number

Not classified as dangerous goods

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

14.8 Other transport information

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not indicated.

15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

SECTION 16: Other information**16a. Indication of where changes have been made to the previous version of the safety data sheet
Revisions of this document**

Earlier versions

2021-03-08 Changes in section(s) 1, 8.

16b. Legend to abbreviations and acronyms used in the safety data sheet**Full texts for Hazard Class and Category Code mentioned in section 3**

| | |
|-------------------|---|
| Acute Tox. 4 | Acute toxicity (oral), Hazard Category 4 - Acute Tox. 4, H302 - Harmful if swallowed |
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Hazard Category 2 - STOT RE 2, H373 - May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard> |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Hazard Category 2 - Eye Irrit. 2, H319 - Causes serious eye irritation |
| Eye Dam. 1 | Serious eye damage/eye irritation, Hazard Category 1 - Eye Dam. 1, H318 - Causes serious eye damage |
| Aquatic Chronic 3 | Hazardous to the aquatic environment — Chronic Hazard, Category 3 - Aquatic Chronic 3, H412 - Harmful to aquatic life with long lasting effects |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 - Aquatic Chronic 2, H411 - Toxic to aquatic life with long lasting effects |

Explanations of the abbreviations in Section 8**United Kingdom**

Sk Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

16c. Key literature references and sources for data

Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2021-12-22.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

Full texts for Regulations mentioned in this Safety Data Sheet

- 1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- 1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- 89/391 COUNCIL DIRECTIVE (89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work
- 2008/98/EC DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

16e. List of relevant hazard statements and/or precautionary statements

Full texts for hazard statements mentioned in section 3

- H302 Harmful if swallowed
- H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>
- H319 Causes serious eye irritation
- H318 Causes serious eye damage
- H412 Harmful to aquatic life with long lasting effects
- H411 Toxic to aquatic life with long lasting effects

16f. Advice on any training appropriate for workers to ensure protection of human health and the environment

Warning for misuse

This product is not expected to cause severe harm to humans or the environment. However the manufacturer, the distributor or the supplier cannot be responsible for unusual or criminal use of the product.

Other relevant information

Not indicated

Editorial information



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