

SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

Product name: EK-CRYOFUEL SOLID CONCENTRATE

Creation date: 21.05.2021, Revision: 13.10.2023, version: 1.1

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

1.1 Product identifier

Product name

EK-CRYOFUEL SOLID CONCENTRATE

UFI:

3DXA-J97D-U004-1T04



<https://my.chemius.net/p/vtaSA3/en/pd/en>

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

Relevant identified uses

Coolant for water cooling of computer systems.

Uses advised against

Not for consumption.

1.3 Details of the supplier of the safety data sheet

Manufacturer

KIMI d.o.o.

Planjava 1

1236 Trzin, Slovenia

+386 1 5300 550

info@kimi.si

1.4 Emergency Telephone Number

Emergency

112

Manufacturer

+386 1 5300 550

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Sens. 1; H317 May cause an allergic skin reaction.

2.2 Label elements

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



Signal word: WARNING

H317 May cause an allergic skin reaction.
 P102 Keep out of reach of children.
 P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P501 Dispose of contents/container in accordance with national regulations.

Contains:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1)

2.3 Other hazards**PBT/vPvB**

No information.

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Additional information

The mixture does not contain substance(s) included in the list established in accordance with Article 59 of REACH for having endocrine disrupting properties, or substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

For mixtures see 3.2.

3.2 Mixtures

| Name | CAS EC Index Reach | % | Classification according to Regulation (EC) No 1272/2008 (CLP) | Specific Concentration Limits | Notes for substances |
|---|---------------------------------|----------|--|---|----------------------|
| sodium 2-ethylhexanoate | 19766-89-3 243-283-8 - | 1-2,5 | Repr. 2; H361d | / | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | 55965-84-9 - 613-167-00-5 | 0,01-0,1 | Acute Tox. 3; H301 Acute Tox. 2; H310 Skin Corr. 1C; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400; M = 100 Aquatic Chronic 1; H410; M = 100 EUH071 | Skin Corr. 1C; H314; C ≥ 0.6% Skin Irrit. 2; H315; 0.06% ≤ C < 0.6% Skin Sens. 1A; H317; C ≥ 0.0015% Eye Dam. 1; H318; C ≥ 0.6% Eye Irrit. 2; H319; 0.06% ≤ C < 0.6% | B |

Notes for substances

| | |
|---|--|
| B | <p>Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.</p> <p>In Part 3 entries with Note B have a general designation of the following type: "nitric acid ... %".</p> <p>In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.</p> |
|---|--|

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency.

Following inhalation

Remove patient to fresh air - move out of dangerous area. If symptoms occur, seek medical advice.

Following skin contact

Take off all contaminated clothing. If symptoms persist, seek medical attention. Wash affected skin areas immediately with plenty of water and soap.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

Following skin contact

May cause sensitisation by skin contact (symptoms: itching, redness, rashes).

Following eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

Following ingestion

May cause nausea/vomiting and diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed

No information.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

5.3 Advice for firefighters

Protective actions

No information.

Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

No information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

No information.

For emergency responders

No information.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

No information.

For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

No information.

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures

No information.

Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin and eyes. Do not breathe vapours/mist.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep away from food, drink and animal feeding stuffs. Store at room temperature. Keep out of the reach of children.

Packaging materials

The original container of producer.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)**Recommendations**

No information.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Occupational Exposure limit values**

| Name | mg/m ³ | ml/m ³ | Short-term value mg/m ³ | Short-term value ml/m ³ | Remark | Biological Tolerance Values |
|---|-------------------|-------------------|---------------------------------------|---------------------------------------|--------|--------------------------------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | 0.05 | / | / | / | 8 h | / |
| Propane-1,2-diol particulates (57-55-6) | 10 | / | / | / | / | / |
| Propane-1,2-diol total vapour and particulates (57-55-6) | 474 | 150 | / | / | / | / |

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values**For product**

No information.

For components

| Name | Type | Exposure route | exp. frequency | Remark | value |
|-------------------------|----------|----------------|----------------------------|--------|-----------------------|
| sodium 2-ethylhexanoate | Worker | dermal | long term systemic effects | / | 2 mg/kg bw/day |
| sodium 2-ethylhexanoate | Worker | inhalation | long term systemic effects | / | 14 mg/m ³ |
| sodium 2-ethylhexanoate | Consumer | oral | long term systemic effects | / | 1 mg/kg bw/day |
| sodium 2-ethylhexanoate | Consumer | dermal | long term systemic effects | / | 1 mg/kg bw/day |
| sodium 2-ethylhexanoate | Consumer | inhalation | long term systemic effects | / | 3.5 mg/m ³ |

PNEC values**For product**

No information.

For components

| Name | Exposure route | Remark | value |
|-------------------------|-----------------------------|------------|--------------|
| sodium 2-ethylhexanoate | fresh water | / | 0.36 mg/L |
| sodium 2-ethylhexanoate | marine water | / | 0.036 mg/L |
| sodium 2-ethylhexanoate | water, intermittent release | / | 0.493 mg/L |
| sodium 2-ethylhexanoate | fresh water sediment | dry weight | 0.301 mg/kg |
| sodium 2-ethylhexanoate | marine water sediment | dry weight | 0.0301 mg/kg |
| sodium 2-ethylhexanoate | soil | dry weight | 0.0579 mg/kg |
| sodium 2-ethylhexanoate | water treatment plant | / | 71.7 mg/L |

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

Personal protective equipment

Eye and face protection

Safety glasses with side protection (BS EN ISO 16321-1:2022).

Hand protection

Protective gloves (EN ISO 374-1:2016).

Appropriate materials

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022).

Respiratory protection

No information.

Thermal hazards

No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

No information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

according to specification milky violet blue green white yellow orange red

Odour

characteristic

Important health, safety and environmental information

| | |
|--|---|
| Odour threshold | No information. |
| Melting point/Freezing point | No information. |
| Boiling point or initial boiling point and boiling range | No information. |
| Flammability | No information. |
| Lower and upper explosion limit | No information. |
| Flash point | No information. |
| Auto-ignition temperature | No information. |
| Decomposition temperature | No information. |
| pH | 8 — 9 at 20 °C |
| Viscosity | No information. |
| Solubility | Water: miscible |
| Partition coefficient | No information. |
| Vapour pressure | No information. |
| Density and/or relative density | Density: ca. 1 g/cm ³ at 20 °C |
| Relative vapour density | No information. |
| Particle characteristics | No information. |

9.2 Other information

| | |
|----------------------|-----------------|
| Explosive properties | No information. |
|----------------------|-----------------|

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No information.

10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

No information.

10.4 Conditions to avoid

No special precautions required. Consider the directions for use and storage.

10.5 Incompatible materials

No information.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11: TOXICOLOGICAL INFORMATION

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

(a) Acute toxicity

For components

| Name | Exposure route | Type | Species | Time | value | Method | Remark |
|---|----------------------|------------------|---------|------|-----------------------|----------|--------|
| sodium 2-ethylhexanoate | oral | LD ₅₀ | rat | / | 2043 mg/kg bw | OECD 401 | / |
| sodium 2-ethylhexanoate | dermal | LD ₅₀ | rat | / | > 2000 mg/kg bw | OECD 402 | / |
| sodium 2-ethylhexanoate | inhalation (vapours) | LC ₀ | rat | 8 h | 0.11 mg/l | OECD 403 | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | oral | LD ₅₀ | rat | / | 53 mg/kg | / | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | inhalation | LC ₅₀ | rat | 4 h | 330 mg/m ³ | / | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | inhalation | LC ₅₀ | rat | 4 h | 2.36 mg/l | / | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | dermal | LD ₅₀ | rabbit | / | 660 mg/kg | / | / |

(b) Skin corrosion/irritation

For components

| Name | Species | Time | result | Method | Remark |
|---|---------|------|-----------|----------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | rabbit | / | Corrosive | OECD 404 | / |

(c) Serious eye damage/irritation

No information.

(d) Respiratory or skin sensitisation

For components

| Name | Exposure route | Species | Time | result | Method | Remark |
|---|----------------|---------|------|--|--------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | dermal | / | / | May cause sensitisation by skin contact. | / | / |

(e) (Germ cell) mutagenicity

For components

| Name | Type | Species | Time | result | Method | Remark |
|---|------|---------|------|----------------|--------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | / | / | / | Not mutagenic. | / | / |

(f) Carcinogenicity

For components

| Name | Exposure route | Type | Species | Time | value | result | Method | Remark |
|---|----------------|------|---------|------|-------|-------------------|--------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | / | / | / | / | / | Not carcinogenic. | / | / |

(g) Reproductive toxicity

For components

| Name | Reproductive toxicity type | Type | Species | Time | value | result | Method | Remark |
|---|----------------------------|------|---------|------|-------|--|--------|-----------------|
| sodium 2-ethylhexanoate | Teratogenicity | oral | rat | / | / | Increased incidence of malformations, delayed fetal growth, lower birth rates. | / | (2-EXA) |
| sodium 2-ethylhexanoate | Teratogenicity | / | mouse | / | / | birth malformations | / | Intraperitoneal |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | / | / | / | / | / | Not toxic for reproduction. | / | / |

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

For components

| Name | Exposure route | Type | Species | Time | Exposure | organ | value | result | Method | Remark |
|---|----------------|------|---------|------|----------|-------|-------|--|--------|--------|
| sodium 2-ethylhexanoate | oral | - | rat | / | / | / | / | 2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet. | / | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | inhalation | - | / | / | / | / | / | Excessive exposure may cause irritation of the upper respiratory tract (nose and throat). | / | / |

(j) Aspiration hazard

For components

| Name | result | Method | Remark |
|---|--|--------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | During ingestion or vomiting, inhalation into the lungs may occur, which can cause tissue damage or lung injury. | / | / |

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity

For components

| Name | Type | value | Exposure time | Species | organism | Method | Remark |
|---|------------------|------------|---------------|-----------|------------------------|----------|--------|
| sodium 2-ethylhexanoate | LC ₅₀ | > 100 mg/L | 96 h | fish | <i>Oryzias latipes</i> | OECD 203 | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | EC ₅₀ | 0.16 mg/L | 48 h | crustacea | <i>Daphnia sp.</i> | / | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | LC ₅₀ | 0.19 mg/L | 96 h | fish | / | / | / |

Chronic (long-term) toxicity

For components

| Name | Type | value | Exposure time | Species | organism | Method | Remark |
|---|------|-------------|---------------|-------------|----------------------------|----------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | NOEC | 0.098 mg/l | 28 days | fish | <i>Oncorhynchus mykiss</i> | OECD 210 | / |
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | NOEC | 0.0036 mg/l | 21 days | crustaceans | <i>Daphnia magna</i> | OECD 211 | / |

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

For components

| Name | Environment | Type / Method | Half Time | Evaluation | Method | Remark |
|---|-------------|------------------|-----------------|------------|--------|-----------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | Air | photodegradation | 0.38 - 1.3 days | 50% | / | half-life |

Biodegradation

For components

| Name | Type | Rate | Time | Evaluation | Method | Remark |
|---|---------|--------|---------|-----------------------|------------|--------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | aerobic | > 60 % | 28 days | readily biodegradable | OECD 301 D | / |

12.3 Bioaccumulative potential

Partition coefficient

For components

| Name | Media | value | Temperature °C | pH | Concentration | Method |
|---|---------|--------------|----------------|----|---------------|----------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | log Kow | -0.71 - 0.75 | 20 | / | / | OECD 117 |

Bioconcentration factor (BCF)

No information.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

For components

| Name | Type | Criterion | value | Evaluation | Method | Remark |
|---|------|-----------|-------|------------|--------|-----------------|
| reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) | Soil | / | 28 | / | / | Koc, estimation |

12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

12.7 Other adverse effects

No information.

12.8 Additional information**For product**

Do not allow to reach ground water, water courses or sewage system.

For components**sodium 2-ethylhexanoate**

Do not allow to reach ground water, water bodies or sewage systems.

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1)

This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product / Packaging disposal****Waste chemical**

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

16 01 14* - antifreeze fluids containing dangerous substances

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 02 - plastic packaging

Waste treatment-relevant information

No information.

Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

| ADR/RID | IMDG | IATA | ADN |
|---|---|---|---|
| 14.1 UN number or ID number | | | |
| Not dangerous according to transport regulations. | Not dangerous according to transport regulations. | Not dangerous according to transport regulations. | Not dangerous according to transport regulations. |
| 14.2 UN proper shipping name | | | |
| Not given/not applicable | Not given/not applicable | Not given/not applicable | Not given/not applicable |
| 14.3 Transport hazard class(es) | | | |
| Not given/not applicable | Not given/not applicable | Not given/not applicable | Not given/not applicable |
| 14.4 Packing group | | | |
| Not given/not applicable | Not given/not applicable | Not given/not applicable | Not given/not applicable |
| 14.5 Environmental hazards | | | |

| | | | |
|---|--|----|--|
| NO | NO | NO | NO |
| 14.6 Special precautions for user | | | |
| Limited quantities Not given/not applicable | Limited quantities Not given/not applicable | | Limited quantities Not given/not applicable |
| 14.7 Maritime transport in bulk according to IMO instruments | | | |
| | Not given/not applicable | | |

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents
No information.

Special instructions
No information.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Indication of changes

2.2 Label elements 2.3 Other hazards 3.2 Mixtures 4.1 Description of first aid measures 6.3 Methods and material for containment and cleaning up 8.2 Exposure controls 9.1 Information on basic physical and chemical properties 9.2 Other information 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 12.6 Endocrine disrupting properties 12.7 Other adverse effects 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture 15.2 Chemical Safety Assessment

Key literature references and sources for data

MSDS of ingredients of the product.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 CEN - European Committee for Standardisation
 C&L - Classification and Labelling
 CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
 CAS# - Chemical Abstracts Service number
 CMR - Carcinogen, Mutagen, or Reproductive Toxicant
 CSA - Chemical Safety Assessment
 CSR - Chemical Safety Report
 DMEL - Derived Minimal Effect Level
 DNEL - Derived No Effect Level
 DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H361d Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.