1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name

EK-CRYOFUEL SOLID CONCENTRATE

Synonyms

EK-CryoFuel Solid Electric Purple Concentrate 250mL (EAN 3831109880272), EK-CryoFuel Solid Azure Blue Concentrate 250mL (EAN 3831109880289), EK-CryoFuel Solid Neon Green Concentrate 250mL (EAN 3831109880296), EK-CryoFuel Solid Cloud White Concentrate 250mL (EAN 3831109880234), EK-CryoFuel Solid Laguna Yellow Concentrate 250mL (EAN 3831109880241), EK-CryoFuel Solid Fire Orange Concentrate 250mL (EAN 3831109880258), EK-CryoFuel Solid Scarlet Red Concentrate 250mL (EAN 3831109880265), EK-CryoFuel Mystic Fog Concentrate 250 mL (EAN 3831109829929)

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
Tel: 00386 (0)1 5300 550
Fax: 00386 (0)1 5300 580
E-mail: info@kimi.si

Supplier

EKWB d.o.o.
Address: Poslovna Cona Pod Lipami 18, 1218 Komenda, Slovenia
Phone: 0590 96610

1.4. Emergency telephone number

Emergency

112

Supplier

0590 96610

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

2.2.1. 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.

2.2.2. Contains:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (CAS: 55965-84-9, Index: 613-167-00-5)

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

For mixtures see 3.2.

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>EC</th>
<th>Index</th>
<th>%</th>
<th>Classification according to Regulation (EC) No 1272/2008 (CLP)</th>
<th>Specific Conc. Limits</th>
<th>REACH Registration No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate</td>
<td>19766-89-3</td>
<td>243-283-8</td>
<td>-</td>
<td>1-2,5</td>
<td>Repr. 2; H361d</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1)</td>
<td>55965-84-9</td>
<td>-</td>
<td>613-167-00-5</td>
<td>0,01-0,1</td>
<td>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</td>
<td>Skin Corr. 1C; H314: C ≥ 0,6 % Skin Irrit. 2; H315: 0,06 % ≤ C &lt; 0,6 % Skin Sens. 1A; H317: C ≥ 0,0015 % Eye Dam. 1; H318: C ≥ 0,6 % Eye Irrit. 2; H319: 0,06 % ≤ C &lt; 0,6 %</td>
<td>-</td>
</tr>
</tbody>
</table>
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.

In Part 3 entries with Note B have a general designation of the following type: "nitric acid … %".

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.

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 thoroughly 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

Inhalation

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

Skin contact

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

Eye contact

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

Ingestion

May cause nausea/vomiting and diarrhea.

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

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media


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**

**Special protective equipment for firefighters**

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).

---

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

**Protective equipment**

Use personal protective equipment (Section 8).

**Emergency procedures**

Ensure adequate ventilation.

6.1.2. For emergency responders

---

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

6.3.1. For containment

---

6.3.2. For cleaning up

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

6.3.3. Other information

---

6.4. Reference to other sections

See also Sections 8 and 13.

---

**SECTION 7. HANDLING AND STORAGE**

7.1. Precautions for safe handling

7.1.1. Protective measures

**Measures to prevent fire**

Ensure adequate ventilation.

**Measures to prevent aerosol and dust generation**

---

**Measures to protect the environment**

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

7.1.2. 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

7.2.1. 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.

7.2.2. Packaging materials
The original container of producer.

7.2.3. Requirements for storage rooms and vessels
Close opened containers after use. Put the containers upright to prevent from leaking.

7.2.4. Storage class
- 

7.2.5. Further information on storage conditions
- 

7.3. Specific end use(s)
Recommendations
- 

Industrial sector specific solutions
- 

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

<table>
<thead>
<tr>
<th>Name (CAS)</th>
<th>Limit values</th>
<th>Short-term exposure limit</th>
<th>Remarks</th>
<th>Biological Tolerance Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>0,05</td>
<td>8 h</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.1.2. Information on monitoring procedures

8.1.3. DNEL/DMEL values

For components

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Exposure route</th>
<th>Exposure frequency</th>
<th>Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Worker</td>
<td>dermal</td>
<td>long term (systemic effects)</td>
<td>2 mg/kg bw/day</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Worker</td>
<td>inhalation</td>
<td>long term (systemic effects)</td>
<td>14 mg/m³</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Consumer</td>
<td>oral</td>
<td>long term (systemic effects)</td>
<td>1 mg/kg bw/day</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Consumer</td>
<td>dermal</td>
<td>long term (systemic effects)</td>
<td>1 mg/kg bw/day</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Consumer</td>
<td>inhalation</td>
<td>long term (systemic effects)</td>
<td>3,5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>
8.1.4. PNEC values

For components

<table>
<thead>
<tr>
<th>Name</th>
<th>Exposure route</th>
<th>Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>fresh water</td>
<td>0,36 mg/L</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>marine water</td>
<td>0,036 mg/L</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>water, intermittent release</td>
<td>0,493 mg/L</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>fresh water sediment</td>
<td>0,301 mg/kg</td>
<td>dry weight</td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>marine water sediment</td>
<td>0,0301 mg/kg</td>
<td>dry weight</td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>soil</td>
<td>0,0579 mg/kg</td>
<td>dry weight</td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>water treatment plant</td>
<td>71,7 mg/L</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

8.2.1. 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.

Technical measures to prevent exposure
Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection
Safety glasses with side protection (EN 166).

Hand protection
Protective gloves (EN 374).

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

Respiratory protection
- Thermal hazards
  -

8.2.3. Environmental exposure controls
-
## Important health, safety and environmental information

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>8 – 9 at 20 °C</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information.</td>
</tr>
<tr>
<td>Initial boiling point/boiling range</td>
<td>No information.</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information.</td>
</tr>
<tr>
<td>Explosion limits (vol%)</td>
<td>No information.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No information.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No information.</td>
</tr>
<tr>
<td>Density</td>
<td><strong>Density:</strong> ca. 1 g/cm³ at 20 °C</td>
</tr>
<tr>
<td>Solubility</td>
<td><strong>Water:</strong> miscible</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No information.</td>
</tr>
</tbody>
</table>

### 9.2. Other information

**Remarks:**

### SECTION 10. STABILITY AND REACTIVITY

#### 10.1. Reactivity

- 

#### 10.2. Chemical stability

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

#### 10.3. Possibility of hazardous reactions

- 

#### 10.4. Conditions to avoid

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

#### 10.5. Incompatible materials

- 

#### 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 toxicological effects

##### (a) Acute toxicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Exposure route</th>
<th>Type</th>
<th>Species</th>
<th>Time</th>
<th>Value</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>oral</td>
<td>LD$_{50}$</td>
<td>rat</td>
<td>2043</td>
<td>mg/kg bw</td>
<td>OECD 401</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>dermal</td>
<td>LD$_{50}$</td>
<td>rat</td>
<td>&gt; 2000</td>
<td>mg/kg bw</td>
<td>OECD 402</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>inhalation (vapours)</td>
<td>LC$_{50}$</td>
<td>rat</td>
<td>8 h</td>
<td>0,11 mg/l</td>
<td>OECD 403</td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>oral</td>
<td>LD$_{50}$</td>
<td>rat</td>
<td>53</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>inhalation</td>
<td>LC$_{50}$</td>
<td>rat</td>
<td>330</td>
<td>mg/m$^3$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>inhalation</td>
<td>LC$_{50}$</td>
<td>rat</td>
<td>4 h</td>
<td>2,36 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>dermal</td>
<td>LD$_{50}$</td>
<td>rabbit</td>
<td>660</td>
<td>mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

##### (b) Skin corrosion/irritation

<table>
<thead>
<tr>
<th>Name</th>
<th>Species</th>
<th>Time</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>rabbit</td>
<td></td>
<td>Corrosive</td>
<td>OECD 404</td>
<td></td>
</tr>
</tbody>
</table>

##### (c) Serious eye damage/irritation

No information.

##### (d) Respiratory or skin sensitisation

<table>
<thead>
<tr>
<th>Name</th>
<th>Exposure route</th>
<th>Species</th>
<th>Time</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>dermal</td>
<td></td>
<td></td>
<td>May cause sensitisation by skin contact.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

##### (e) (Germ cell) mutagenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Species</th>
<th>Time</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td></td>
<td></td>
<td></td>
<td>Not mutagenic.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

##### (f) Carcinogenicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Exposure route</th>
<th>Type</th>
<th>Species</th>
<th>Time</th>
<th>Value</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not carcinogenic.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(g) Reproductive toxicity

<table>
<thead>
<tr>
<th>Name</th>
<th>Reproductive toxicity type</th>
<th>Type</th>
<th>Species</th>
<th>Time</th>
<th>Value</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Teratogenicity</td>
<td>oral</td>
<td>rat</td>
<td></td>
<td></td>
<td>Increased incidence of malformations, delayed fetal growth, lower birth rates.</td>
<td>(2-EXA)</td>
<td></td>
</tr>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>Teratogenicity</td>
<td>mouse</td>
<td></td>
<td></td>
<td></td>
<td>Not toxic for reproduction.</td>
<td>intraperitoneal</td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Exposure route</th>
<th>Type</th>
<th>Species</th>
<th>Time</th>
<th>Organ</th>
<th>Value</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>oral</td>
<td>-</td>
<td>rat</td>
<td></td>
<td>2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet.</td>
<td>OECD 203</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>inhalation</td>
<td>-</td>
<td></td>
<td></td>
<td>Excessive exposure may cause irritation of the upper respiratory tract (nose and throat).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(j) Aspiration hazard

<table>
<thead>
<tr>
<th>Name</th>
<th>Result</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>During ingestion or vomiting, inhalation into the lungs may occur, which can cause tissue damage or lung injury.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

<table>
<thead>
<tr>
<th>Substance (CAS Nr.)</th>
<th>Type</th>
<th>Value</th>
<th>Exposure time</th>
<th>Species</th>
<th>Organism</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium 2-ethylhexanoate (19766-89-3)</td>
<td>LC₉₀</td>
<td>&gt; 100 mg/L</td>
<td>96 h</td>
<td>fish</td>
<td>Oryzias latipes</td>
<td>OECD 203</td>
<td></td>
</tr>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>EC₅₀</td>
<td>0,16 mg/L</td>
<td>48 h</td>
<td>crustacea</td>
<td>Daphnia sp.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LC₅₀</td>
<td>0,19 mg/L</td>
<td>96 h</td>
<td>fish</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12.1.2. Chronic (long-term) toxicity

For components

<table>
<thead>
<tr>
<th>Substance (CAS Nr.)</th>
<th>Type</th>
<th>Value</th>
<th>Exposure time</th>
<th>Species</th>
<th>Organism</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>NOEC</td>
<td>0.098 mg/l</td>
<td>28 days</td>
<td>fish</td>
<td><em>Oncorhynchus mykiss</em></td>
<td>OECD 210</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NOEC</td>
<td>0.0036 mg/l</td>
<td>21 days</td>
<td>crustaceans</td>
<td><em>Daphnia magna</em></td>
<td>OECD 211</td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

For components

<table>
<thead>
<tr>
<th>Substance (CAS Nr.)</th>
<th>Environment</th>
<th>Type / Method</th>
<th>Half Time</th>
<th>Evaluation</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>Air</td>
<td>photodegradation</td>
<td>0.38 – 1.3 days</td>
<td>50%</td>
<td>half-life</td>
<td></td>
</tr>
</tbody>
</table>

12.2.2. Biodegradation

For components

<table>
<thead>
<tr>
<th>Substance (CAS Nr.)</th>
<th>Type</th>
<th>Rate</th>
<th>Time</th>
<th>Evaluation</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>aerobic</td>
<td>&gt; 60%</td>
<td>28 days</td>
<td>readily biodegradable</td>
<td>OECD 301 D</td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

12.3.1. Partition coefficient

For components

<table>
<thead>
<tr>
<th>Substance (CAS Nr.)</th>
<th>Media</th>
<th>Value</th>
<th>Temperature</th>
<th>pH</th>
<th>Concentration</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>log Kow</td>
<td>-0.71 – 0.75</td>
<td>20 °C</td>
<td></td>
<td>OECD 117</td>
<td></td>
</tr>
</tbody>
</table>

12.3.2. Bioconcentration factor (BCF)

No information.

12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

For components

<table>
<thead>
<tr>
<th>Substance (CAS Nr.)</th>
<th>Type</th>
<th>Criterion</th>
<th>Value</th>
<th>Evaluation</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazolin-3-one (3:1) (55965-84-9)</td>
<td>Soil</td>
<td>Koc, estimation</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.
12.7. Additional information
For product
Do not allow to reach ground water, water courses or sewage system.

For components
**Substance: sodium 2-ethylhexanoate**
Do not allow to reach ground water, water bodies or sewage systems.
**Substance: 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

13.1.1. 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

13.1.2. Waste treatment-relevant information

13.1.3. Sewage disposal-relevant information

13.1.4. Other disposal recommendations

SECTION 14. TRANSPORT INFORMATION

14.1. UN number
Not applicable.

14.2. UN proper shipping name
ADR, RID, IMDG, ADN, IATA: Not dangerous according to transport regulations.

14.3. Transport hazard class(es)
Not applicable.

14.4. Packing group
Not applicable.

14.5. Environmental hazards
NO.

14.6. Special precautions for user
Not applicable.
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

SECTION 15. REGULATORY INFORMATION

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


- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Indication of changes

- 

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - European 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
ECE-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
SAFETY DATA SHEET according to Regulation 1907/2006

Product name: EK-CRYOFUEL SOLID CONCENTRATE
Creation date: 31.1.2017 · Revision: 26.10.2020 · Version: 1

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
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

Key literature references and sources for data
MSDS of ingredients of the product.

List of relevant H phrases

H301 Toxic if swallowed.
H310 Fatal in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
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.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user’s working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.