

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

1.1 Product identifier

<table>
<thead>
<tr>
<th>Trade name</th>
<th>Biocop TF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration number (REACH)</td>
<td>not relevant (mixture)</td>
</tr>
<tr>
<td>Item code</td>
<td>1202-1/GL / 1202-5/GL</td>
</tr>
</tbody>
</table>

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

| Relevant identified uses | industrial use paint |

1.3 Details of the supplier of the safety data sheet

DISTRISERV
43 Rue Michel Gachet
13007 Marseille
France

Telephone: +33 (0) 9 79 58 61 00
e-mail: contact@seahawkpaints.eu

1.4 Emergency telephone number

Emergency information service

- Austria : +431 406 43 43;
- Belgium : +070 245 245 (7 /7 24/24);
- Bulgaria : +359 2 9154 409;
- Czech republic tel +420 224 919 293, +420 224 915 402;
- Denmark : 62 12 12 12;
- Estonia : tel nationally 16662, from abroad (+372) 626 93 90;
- Finland : (09) 471 977 (direct) or (09) 4711 (exchange);
- France : + 33 (0) 1 45 42 59 59 (7/7 24/24);
- Germany : 030/19240;
- Hungary : +36 1 476 6464;
- Ireland : 01 8092566 or 01 8379964;
- Italie : 0659943733;
- Lithuania : 370 5 236 20 52 ou 370 687 53 378;
- Malta : 2545 0000;
- Netherlands : 030-2748888;
- New zealand : 0800 764 766 or 0800 611 116;
- Norway : + 47 810 20 050;
- Portugal : 808 250 143;
- Romania : 021.318.36.06;
- Slovakia : 421 2 5477 4166;
- Spain : + 34 91 562 04 20;
- Sweden : 112 ou 08-331231.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

| GHS chapter | - |
| Hazard class and category | - |
| Hazard statement code(s) | - |
2.6 flammable liquids Cat. 3 (Flam. Liq. 3) H226
3.2 skin corrosion/irritation Cat. 2 (Skin Irrit. 2) H315
3.3 serious eye damage/eye irritation Cat. 1 (Eye Dam. 1) H318
3.8D specific target organ toxicity - single exposure (narcotic effects, drowsiness) Cat. 3 (STOT SE 3) H336
3.10 aspiration hazard Cat. 1 (Asp. Tox. 1) H304
4.1A hazardous to the aquatic environment - acute hazard Cat. 1 (Aquatic Acute 1) H400
4.1C hazardous to the aquatic environment - chronic hazard Cat. 1 (Aquatic Chronic 1) H410

Remarks
For full text of H-phrases: see SECTION 16.

Classification according to Directive 1999/45/EC (DPD)
Indication(s) of danger - Symbol codes - R-phrases
flammable R10
harmful Xn; R20/22-65
irritant Xi; R36/38
dangerous for the environment N; R50-53

Remarks
For full text of R-phrases: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects
The product is combustible and can be ignited by potential ignition sources. Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

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

Signal word Danger

Pictograms
GHS02, GHS05, GHS07, GHS08, GHS09

Hazard statements

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H336 May cause drowsiness or dizziness.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Precautionary statements - prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - response

P301+P310 IF SWALLOWED: immediately call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331 Do NOT induce vomiting.
P332+P313 If skin irritation occurs: get medical advice/attention.
P362 Take off contaminated clothing.
P370+P378 In case of fire: Use foam to extinguish - never use water.

Precautionary statements - storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant.

Hazardous ingredients for labelling: pyrithione zinc, Solvent naphtha (petroleum), light arom.

2.3 Other hazards
Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients

3.1 Substances
not relevant (mixture)

3.2 Mixtures

Description of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>Identifier</th>
<th>wt%</th>
<th>Classification acc. to 1272/2008/EC</th>
<th>Pictograms</th>
<th>Classification acc. to 67/548/EEC</th>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>CAS No 1317-39-1, EC No 215-270-7</td>
<td>≥ 25 - &lt; 50</td>
<td>Acute Tox. 4 / H302, Aquatic Acute 1 / H400, Aquatic Chronic 1 / H410</td>
<td>!</td>
<td>harmful; Xi; R22 dangerous for the environment; N; R50-53</td>
<td></td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>CAS No 64742-95-6, EC No 265-199-0</td>
<td>≥ 10 - &lt; 25</td>
<td>Flam. Liq. 3 / H226, Skin Irrit. 2 / H315, STOT SE 3 / H366, Asp. Tox. 1 / H304, Aquatic Chronic 2 / H411</td>
<td>!</td>
<td>flammable; R10 harmful; Xi; R65 irritant; Xi; R38 R67 dangerous for the environment; N; R51-53</td>
<td></td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>CAS No 13463-41-7, EC No 238-671-3</td>
<td>≥ 5 - &lt; 10</td>
<td>Acute Tox. 4 / H302, Acute Tox. 3 / H331, Eye Dam. 1 / H318, Aquatic Acute 1 / H400, Aquatic Chronic 1 / H410</td>
<td>!</td>
<td>toxic; T; R23 harmful; Xi; R22 irritant; Xi; R41 dangerous for the environment; N; R50</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

General notes
Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation
If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact
Wash with plenty of soap and water.

Following eye contact
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

4.3 Indication of any immediate medical attention and special treatment needed
none
SECTION 5: Firefighting measures

5.1 Extinguishing media
   Suitable extinguishing media
   water spray, alcohol resistant foam, BC-powder, carbon dioxide (CO2)
   Unsuitable extinguishing media
   water jet

5.2 Special hazards arising from the substance or mixture
   In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.
   Hazardous combustion products
   nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters
   In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   For non-emergency personnel
   Remove persons to safety.
   For emergency responders
   Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions
   Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up
   Advices on how to contain a spill
   Covering of drains.
   Advices on how to clean up a spill
   Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).
   Appropriate containment techniques
   Use of adsorbent materials.
   Other information relating to spills and releases
   Place in appropriate containers for disposal. Ventilate affected area.

Reference to other sections
SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

• Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools.

• Warning

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

• Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

• Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

• Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

• Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.
### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

**National limit values**

**Occupational exposure limit values (Workplace Exposure Limits)**

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA [mg/m³]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
<th>wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>IOELV</td>
<td>100</td>
<td>200</td>
<td>884</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>UK</td>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>WEL</td>
<td>100</td>
<td>125</td>
<td>552</td>
<td>&lt; 1</td>
</tr>
</tbody>
</table>

**Notation**

- **STEL**: Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.
- **TWA**: Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

#### Relevant DNELs/DMELs/PNECs and other threshold levels

- **relevant DNELs of components of the mixture**

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>End-point</th>
<th>Threshold level</th>
<th>Protection goal, route of exposure</th>
<th>Used in</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>DNEL</td>
<td>0.01 mg/kg</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>DNEL</td>
<td>83 mg/kg</td>
<td>human, dermal</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>DNEL</td>
<td>5 mg/m³</td>
<td>human, inhalatory</td>
<td>worker (industry)</td>
<td>chronic - systemic effects</td>
</tr>
</tbody>
</table>

- **relevant PNECs of components of the mixture**

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>End-point</th>
<th>Threshold level</th>
<th>Organism</th>
<th>Environmental compartment</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>PNEC</td>
<td>7.8 µg/l</td>
<td>aquatic organisms</td>
<td>freshwater</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>PNEC</td>
<td>5.2 µg/l</td>
<td>aquatic organisms</td>
<td>marine water</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>PNEC</td>
<td>230 µg/l</td>
<td>microorganisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>PNEC</td>
<td>87 mg/kg</td>
<td>benthic organisms</td>
<td>sediments</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>PNEC</td>
<td>676 mg/kg</td>
<td>pelagic organisms</td>
<td>sediments</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>PNEC</td>
<td>65 mg/kg</td>
<td>terrestrial organisms</td>
<td>soil</td>
<td>short-term (single instance)</td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>PNEC</td>
<td>0.01 mg/l</td>
<td>microorganisms</td>
<td>sewage treatment plant (STP)</td>
<td>short-term (single instance)</td>
</tr>
</tbody>
</table>
8.2 Exposure controls

Appropriate engineering controls
General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection
Wear eye/face protection.

Skin protection

• hand protection
Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.
• other protection measures
Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls
Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance
Physical state liquid
Colour blue for ref 1202-1/GL - black for ref 1205-1/GL
Odour characteristic

Other physical and chemical parameters
pH (value) not determined
Melting point/freezing point not determined
Initial boiling point and boiling range not determined
Flash point 38 °C (determination of flash point - rapid equilibrium closed cup method)
Evaporation rate not determined
Flammability (solid, gas) not relevant (fluid)
Explosive limits not determined
Vapour pressure 5.1 mmHg at 25 °C
Density 1.89
Solubility(ies) not determined
Partition coefficient
n-octanol/water (log KOW) This information is not available.
Auto-ignition temperature not determined
Viscosity not determined
Explosive properties none
Oxidising properties none

9.2 Other information
SECTION 10: Stability and reactivity

10.1 Reactivity
Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s): risk of ignition
• if heated
  risk of ignition

10.2 Chemical stability
See below "Conditions to avoid".

10.3 Possibility of hazardous reactions
No known hazardous reactions.

10.4 Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hints to prevent fire or explosion
Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
Physical stresses which might result in a hazardous situation and have to be avoided
strong shocks

10.5 Incompatible materials
There is no additional information.

10.6 Hazardous decomposition products
Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Test data are not available for the complete mixture.

Classification procedure
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)
Acute toxicity
Shall not be classified as acutely toxic.
• Acute toxicity of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>ATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>oral</td>
<td>1,340</td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>oral</td>
<td>302</td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>inhalation: dust/mist</td>
<td>0.5</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>inhalation: vapour</td>
<td>11</td>
</tr>
</tbody>
</table>
**Safety Data Sheet**

**biocop TF**

---

### Summary of evaluation of the CMR properties

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Specific target organ toxicity (STOT)

- **Specific target organ toxicity - single exposure**
  
  May cause drowsiness or dizziness.

- **Specific target organ toxicity - repeated exposure**
  
  Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

May be fatal if swallowed and enters airways.

---

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Exposure route</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>oral</td>
<td>LD50</td>
<td>1340 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>dicopper oxide</td>
<td>1317-39-1</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>Solvent naphtha (petroleum), light arom.</td>
<td>64742-95-6</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>rabbit</td>
<td></td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>oral</td>
<td>LD50</td>
<td>302 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>copper oxide</td>
<td>1317-38-0</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;2500 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>copper oxide</td>
<td>1317-38-0</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;2000 mg/kg</td>
<td>rat</td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/Irritation**

Causes skin irritation.

**Serious eye damage/eye irritation**

Causes serious eye damage.

---

**Safety Data Sheet**

**biocop TF**

---

### Summary of evaluation of the CMR properties

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Specific target organ toxicity (STOT)

- **Specific target organ toxicity - single exposure**
  
  May cause drowsiness or dizziness.

- **Specific target organ toxicity - repeated exposure**
  
  Shall not be classified as a specific target organ toxicant (repeated exposure).

#### Aspiration hazard

May be fatal if swallowed and enters airways.
SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic life.

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>LC50</td>
<td>2.6 µg/l</td>
<td>fish</td>
<td>96 hours</td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>EC50</td>
<td>8.2 µg/l</td>
<td>aquatic invertebrates</td>
<td>48 hours</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>EC50</td>
<td>2.6 mg/l</td>
<td>aquatic invertebrates</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (chronic) of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Endpoint</th>
<th>Value</th>
<th>Species</th>
<th>Exposure time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha</td>
<td>64742-95-6</td>
<td>EC50</td>
<td>15.41 mg/l</td>
<td>microorganisms</td>
<td>40 h</td>
</tr>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>EC50</td>
<td>5.21 µg/l</td>
<td>aquatic invertebrates</td>
<td>28 d</td>
</tr>
<tr>
<td>zinc oxide</td>
<td>1314-13-2</td>
<td>EC50</td>
<td>0.19 mg/l</td>
<td>aquatic invertebrates</td>
<td>24 h</td>
</tr>
</tbody>
</table>

12.2 Process of degradability

Data are not available.

Degradability of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Process</th>
<th>Degradation rate</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>carbon dioxide generation</td>
<td>39 %</td>
<td>28 d</td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>BCF</th>
<th>Log KOW</th>
<th>BOD5/COD</th>
</tr>
</thead>
<tbody>
<tr>
<td>pyrithione zinc</td>
<td>13463-41-7</td>
<td>8.28</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

12.4 Mobility in soil

Data are not available.
12.5 Results of PBT and vPvB assessment
Data are not available.
12.6 Other adverse effects
Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information
Solvent reclamation/regeneration.

Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings
It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

13.2 Relevant provisions relating to waste

Properties of waste which render it hazardous
H 3-B ‘Flammable’:
liquid substances and preparations having a flash point equal to or greater than 21 °C and less than or equal to 55 °C.

13.3 Remarks
Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number
1263
14.2 UN proper shipping name
PAINT
14.3 Transport hazard class(es)
Class
3 (flammable liquids)

14.4 Packing group
III (substance presenting low danger)
14.5 Environmental hazards
hazardous to the aquatic environment (dicopper oxide)

14.6 Special precautions for user
Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

- Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

UN number
1263
Proper shipping name
PAINT
Class
3
Classification code
F1
Packing group
III
Danger label(s)
3 + "fish and tree"
Environmental hazards: yes (hazardous to the aquatic environment)
Special provisions (SP): 163, 367, 640E, 650
Excepted quantities (EQ): E1
Limited quantities (LQ): 5 L
Transport category (TC): 3
Tunnel restriction code (TRC): D/E
Hazard identification No: 30

- **International Maritime Dangerous Goods Code (IMDG)**
  - UN number: 1263
  - Proper shipping name: PAINT
  - Class: 3
  - Subsidiary risk(s): -
  - Marine pollutant: yes (hazardous to the aquatic environment)
  - Packing group: III
  - Danger label(s): 3 + "fish and tree"

  - Special provisions (SP): 163, 223, 955
  - Excepted quantities (EQ): E1
  - Limited quantities (LQ): 5 L
  - EmS: F-E, S-E
  - Stowage category: E

- **International Civil Aviation Organization (ICAO-IATA/DGR)**
  - UN number: 1263
  - Proper shipping name: Paint
  - Class: 3
  - Environmental hazards: yes (hazardous to the aquatic environment)
  - Packing group: III
  - Danger label(s): 3

  - Special provisions (SP): A3, A72
  - Excepted quantities (EQ): E1
  - Limited quantities (LQ): 10 L
**SECTION 15: Regulatory information**

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

Relevant provisions of the European Union (EU)

15.1.1. Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)

VOC content 398 g/l

National regulations (Austria)

- Ordinance on combustible liquids (VbF)

VbF (group and hazard class):

This Regulation shall not apply:

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>acute toxicity</td>
</tr>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>hazardous to the aquatic environment - acute hazard</td>
</tr>
<tr>
<td>Aquatic Chronic</td>
<td>hazardous to the aquatic environment - chronic hazard</td>
</tr>
<tr>
<td>Asp. Tox.</td>
<td>aspiration hazard</td>
</tr>
<tr>
<td>ATE</td>
<td>Acute Toxicity Estimate</td>
</tr>
<tr>
<td>BCF</td>
<td>BioConcentration Factor</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical Oxygen Demand</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>CMR</td>
<td>Carcinogenic, Mutagenic or toxic for Reproduction</td>
</tr>
<tr>
<td>COD</td>
<td>Chemical Oxygen Demand</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>DPD</td>
<td>Dangerous Preparations Directive (1999/45/EC)</td>
</tr>
<tr>
<td>EC No</td>
<td>The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)</td>
</tr>
<tr>
<td>EH40/2005</td>
<td>EH40/2005 Workplace exposure limits, Table 1: List of approved workplace exposure limits (<a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a>)</td>
</tr>
<tr>
<td>EmS</td>
<td>Emergency Schedule</td>
</tr>
</tbody>
</table>
### Key literature references and sources for data

- Supplier
- CLP (annexe VI and/or notification)
- ECHA

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).
Safety Data Sheet
biocop TF

List of relevant phrases (code and full text as stated in chapter 2 and 3)

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>highly flammable liquid and vapour</td>
</tr>
<tr>
<td>H226</td>
<td>flammable liquid and vapour</td>
</tr>
<tr>
<td>H302</td>
<td>harmful if swallowed</td>
</tr>
<tr>
<td>H304</td>
<td>may be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H315</td>
<td>causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>causes serious eye damage</td>
</tr>
<tr>
<td>H331</td>
<td>toxic if inhaled</td>
</tr>
<tr>
<td>H332</td>
<td>harmful if inhaled</td>
</tr>
<tr>
<td>H336</td>
<td>may cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H400</td>
<td>very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>very toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>H411</td>
<td>toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>H412</td>
<td>harmful to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>R10</td>
<td>flammable</td>
</tr>
<tr>
<td>R11</td>
<td>highly flammable</td>
</tr>
<tr>
<td>R20</td>
<td>harmful by inhalation</td>
</tr>
<tr>
<td>R20/22</td>
<td>harmful by inhalation and if swallowed</td>
</tr>
<tr>
<td>R22</td>
<td>harmful if swallowed</td>
</tr>
<tr>
<td>R23</td>
<td>toxic by inhalation</td>
</tr>
<tr>
<td>R36/38</td>
<td>irritating to eyes and skin</td>
</tr>
<tr>
<td>R38</td>
<td>irritating to skin</td>
</tr>
<tr>
<td>R41</td>
<td>risk of serious damage to eyes</td>
</tr>
<tr>
<td>R50</td>
<td>very toxic to aquatic organisms</td>
</tr>
<tr>
<td>R50/53</td>
<td>very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment</td>
</tr>
<tr>
<td>R51/53</td>
<td>toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment</td>
</tr>
<tr>
<td>R53</td>
<td>may cause long-term adverse effects in the aquatic environment</td>
</tr>
<tr>
<td>R65</td>
<td>harmful: may cause lung damage if swallowed</td>
</tr>
<tr>
<td>R67</td>
<td>vapours may cause drowsiness and dizziness</td>
</tr>
</tbody>
</table>

Disclaimer
This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.
Safety Data Sheet

biocop TF

Version number: GHS 1.0
Date of compilation: 2015-01-27

Written by NATURAKEM (www.naturakem.fr).