1. Substance/preparation and company identification

COOPERS ULTRAKILL® WETTABLE POWDER

Use: Public Health, Industrial health, Insecticide

Company:
Starplex 83 CC
Reg. No. 2004/01564/23
P.O. Box 14374
BREDELL, 1623
SOUTH AFRICA
TEL: (011) 979-4246/7

Emergency contact numbers
Tygerberg Poison Center: 0861 555 777
Griffon Poison Information Centre - 082 446 8946

2. Hazard Identification
   Label elements

Globally Harmonized System, EU (GHS)

Pictogram:

Signal Word:
Warning

Hazard Statement:
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary Statements (Response):
P391 Collect spillage.
Labeling of special preparations (GHS):
May cause paraesthesia. Alpha-Cypermethrin

According to Directive 67/548/EEC or 1999/45/EC

EEC Directives

Hazard symbol(s)
N Dangerous for the environment

R-phrase(s)
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)
S2 Keep out of the reach of children.
S13 Keep away from food, drink and animal feeding stuffs.
S20/21 When using do not eat, drink or smoke.
S29/35 Do not empty into drains, this material and its container must be disposed of in a safe way.
S57 Use appropriate container to avoid environmental contamination.

The product contains: Alpha-Cypermethrin
May cause paraesthesia.

Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]
Aquatic Acute 1
Aquatic Chronic 1

According to Directive 67/548/EEC or 1999/45/EC
Possible Hazards:
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause paraesthesia.

For the classifications not written out in full in this section the full text can be found in section 16.

Other hazards

According to Regulation (EC) No 1272/2008 [CLP]
See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Mixtures

Chemical nature
Insecticide, Wettable powder (WP), Public Health
Hazardous ingredients (GHS) according to Regulation (EC) No. 1272/2008

Alpha-Cypermethrin
Content (W/W): 5 %
CAS Number: 67375-30-8
INDEX-Number: 607-422-00-X
Acute tox. 4 (Inhalation - dust)
Acute tox. 3 (oral)
STOT SE 3 (irr. to respiratory syst.)
STOT SE 2
Aquatic Acute 1
Aquatic Chronic 1
M-factor acute: 10000
M-factor chronic: 1000
H332, H301, H400, H410, H335, H373

Docusate sodium
Content (W/W): < 3 %
CAS Number: 577-11-7
EC-Number: 209-406-4
Skin Corr./Irrit. 2
Eye Dam./Irrit. 1
H318, H315

Kaolin
Content (W/W): < 90 %
CAS Number: 1332-58-7
EC-Number: 310-194-1
Eye Dam./Irrit. 2
H319

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

4. First-aid measures

Description of first aid measures
Remove contaminated clothing.
If inhaled:
Keep patient calm, remove to fresh air.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink plenty of water.

**Most important symptoms and effects, both acute and delayed**
Symptoms: No significant reaction of the human body to the product known.

**Indication of any immediate medical attention and special treatment needed**
Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-fighting measures

**Extinguishing media**
Suitable extinguishing media:
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:
carbon dioxide

**Special hazards arising from the substance or mixture**
carbon monoxide, hydrogen chloride, Carbon dioxide, nitrogen oxides, organochloric compounds
The substances/groups of substances mentioned can be released in case of fire.

**Advice for fire-fighters**
Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

**Environmental precautions**
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

**Methods and material for containment and cleaning up**
For small amounts: Sweep/shovel up.
For large amounts: Sweep/shovel up.
Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

Reference to other sections
Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and storage

Precautions for safe handling
No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:
Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities: Segregate from foods and animal feeds. Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage stability:
Storage duration: 36 Months

Specific end use(s)
For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure controls and personal protection

Control parameters

Components with workplace control parameters
1332-58-7: Kaolin
67375-30-8: Alpha-Cypermethrin (ISO); racemate comprising (R)-alpha-cyano-3-phenoxybenzyl (1S,3S)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate;
(S)-alpha-cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate
577-11-7: Docusate sodium

Exposure controls

Personal protective equipment
Respiratory protection:
Respiratory protection not required.
Hand protection:
Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other
Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)
Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Avoid contact with the skin, eyes and clothing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>powder, free flowing</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>pH value</td>
<td>Approx. 4 - 10</td>
</tr>
<tr>
<td>Melting point</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Boiling range</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>not determined</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>The product has not been tested.</td>
</tr>
<tr>
<td>Density</td>
<td>not determined</td>
</tr>
<tr>
<td>Relative vapour density (air)</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>dispersible</td>
</tr>
<tr>
<td>Partitioning coefficient</td>
<td></td>
</tr>
<tr>
<td>n-octanol/water (log Kow)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Self-ignition</td>
<td>not determined</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No decomposition if stored and handled as prescribed/indicated.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>not applicable</td>
</tr>
<tr>
<td>Explosion hazard</td>
<td>Based on the chemical structure there is no indicating of explosive properties.</td>
</tr>
<tr>
<td>Fire promoting properties</td>
<td>Based on its structural properties the product is not classified as oxidizing.</td>
</tr>
</tbody>
</table>

Other information

Bulk density: approx. 343 kg/m3

Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.
10. Stability and reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
See MSDS section 7 - Handling and storage.

Incompatible materials
Substances to avoid:
strong bases, strong acids, strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Information on toxicological effects

Acute toxicity
Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data:
LD50 rat (oral): > 3,300 mg/kg
LD50 rat (dermal): > 2,000 mg/kg
Information on: Alpha-Cypermethrin
Experimental/calculated data:
LC50 rat (by inhalation): 2.29 mg/l 4 h (OECD Guideline 403)
Tested as dust aerosol.

Irritation
Assessment of irritating effects:
Not irritating to the eyes. Not irritating to the skin.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization
Assessment of sensitization:
There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from products of a similar structure or composition.
Germ cell mutagenicity
Assessment of mutagenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity
Assessment of carcinogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity
Assessment of reproduction toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity
Assessment of teratogenicity:
The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)
Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Alpha-Cypermethrin
Assessment of repeated dose toxicity:
Repeated oral exposure may affect certain organs. Damages the peripheral nerve system.

Other relevant toxicity information
Misuse can be harmful to health.
May cause paraesthesia.

12. Ecological information

Ecotoxicity
Assessment of aquatic toxicity:
Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: alpha-Cypermethrin
Toxicity to fish:
$LC_{50} (96 \text{ h}) 0.0028 \text{ mg/l, Oncorhynchus mykiss (OECD 203; ISO 7346; 84/449/EEC, C.1)}$

Information on: alpha-Cypermethrin
Aquatic invertebrates:
$EC_{50} (48 \text{ h}) 0.0003 \text{ mg/l, Daphnia magna (OECD Guideline 202, part 1)}$

Information on: alpha-Cypermethrin
Aquatic plants:
$EC_{50} (72 \text{ h}) > 1 \text{ mg/l (growth rate), Scenedesmus subspicatus (OECD Guideline 201)}$
$EC_{50} (7 \text{ d}) > 0.00139 \text{ mg/l (growth rate), Lemna gibba}$
Information on: alpha-Cypermethrin
Chronic toxicity to fish:
No observed effect concentration (34 d) 0,03 μg/l, Pimephales promelas

Information on: alpha-Cypermethrin
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0,03 μg/l, Daphnia magna

Persistence and degradability
Assessment biodegradation and elimination (H2O):
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Alpha-Cypermethrin
Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria).

Bio-accumulative potential
Assessment bioaccumulation potential:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Alpha-Cypermethrin
Bio-accumulation potential:
Bio-concentration factor: 910, Cyprinus carpio
Accumulation in organisms is not to be expected.

Results of PBT and vPvB assessment
The product does not contain a substance fulfilling the PBT (persistent/bio-accumulative/toxic) criteria or the vPvB (very persistent/very bio-accumulative) criteria.

Other adverse effects
The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

Additional information
Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste treatment methods
Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.
14. Transport information

**Land transport**

**ADR:**
- Class: 9
- Packaging group: III
- UN-number: 3077
- Hazard label: 9, EHSM
- Designation of goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Contains: Alpha-Cypermethrin)

**RID:**
- Class: 9
- Packaging group: III
- UN-number: 3077
- Hazard label: 9, EHSM
- Designation of goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Alpha-Cypermethrin)

**Inland waterway transport**

**ADNR:**
- Class: 9
- Packaging group: III
- UN-number: 3077
- Hazard label: 9, EHSM
- Designation of goods: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Alpha-Cypermethrin)

**Sea transport**

**IMDG/GGVSee:**
- Class: 9
- Packaging group: III
- UN-number: 3077
- Hazard label: 9, EHSM
- Marine pollutant: YES
- Exact technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Alpha-Cypermethrin)

**Air transport**

**ICAO/IATA:**
- Class: 9
- Packaging group: III
- UN-number: 3077
- Hazard label: 9, EHSM
- Exact technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains Alpha-Cypermethrin)

15. Regulatory information

**Regulations of the European union (Labelling) / National legislation/Regulations**

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

For the user of this plant-protective product applies: ‘To avoid risks to man and the environment, comply with the instructions for use.’ (Directive 1999/45/EC, Article 10, No. 1.2)

**Chemical Safety Assessment**

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.
16. Other information
For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

- **T** Toxic.
- **N** Dangerous for the environment.
- **Xi** Irritant.
- **20** Harmful by inhalation.
- **25** Toxic if swallowed.
- **37/38** Irritating to respiratory system and skin.
- **48/22** Harmful: danger of serious damage to health by prolonged exposure if swallowed.
- **50/53** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **38** Irritating to skin.
- **41** Risk of serious damage to eyes.

**Aquatic Acute** Hazardous to the aquatic environment - acute
**Aquatic Chronic** Hazardous to the aquatic environment - chronic
**Acute Tox.** Acute toxicity
**STOT SE** Specific target organ toxicity — single exposure
**STOT RE** Specific target organ toxicity — repeated exposure
**Skin Corr./Irrit.** Skin corrosion/irritation
**Eye Dam./Irrit.** Serious eye damage/eye irritation

- **H332** Harmful if inhaled.
- **H301** Toxic if swallowed.
- **H400** Very toxic to aquatic life.
- **H410** Very toxic to aquatic life with long lasting effects.
- **H335** May cause respiratory irritation.
- **H373** May cause damage to organs through prolonged or repeated exposure.
- **H318** Causes serious eye damage.
- **H315** Causes skin irritation.
- **H319** Causes serious eye irritation.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.