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

Product information

Product Name: Cylence Ultra Insecticide Cattle Ear Tags
MSDS Number: 122000007125

Company
BAYER HEALTHCARE LLC
Animal Health Division
12707 Shawnee Mission Parkway
(West 63rd)
Shawnee, KS 66216-1846
UNITED STATES
(800) 633-3796

In case of emergency: (800) 422-9874
Chemtrec: (800) 424-9300
BAYER INFORMATION PHONE:(800) 633-3796
INTERNATIONAL:(703) 527-3887

2. HAZARDS IDENTIFICATION

Emergency Overview

May cause eye, skin, and respiratory tract irritation. Harmful if ingested, inhaled or absorbed through the skin. Harmful if swallowed.

Hazard Communication (29CFR 1910.1200)

Eye Contact Skin Absorption Skin Contact

Acute Inhalation Hazards
Exposure during the end use of this product is expected to be minimal. The active ingredient is toxic by inhalation. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Acute Skin Hazards
May cause irritation with symptoms of reddening and itching. Paraesthesia (a tingling or burning sensation on the surface of the skin) may result from skin contact with synthetic pyrethroids and normally subsides without treatment within 24 hours. Toxic by skin absorption

Acute Eye Hazards
May cause irritation with symptoms of reddening, tearing and stinging.
Acute Ingestion Hazards
Moderately toxic by ingestion.

Chronic Effects of Exposure
No applicable information was found concerning any adverse chronic health effects from overexposure to this product.

Medical Conditions Aggravated by Exposure
Eye disorders, Skin disorders, Respiratory tract disorders, Kidney disorders, Liver disorders

Metal oxide

IARC - Overall evaluation: Possibly carcinogenic to humans.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Weight percent</th>
<th>Components</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 - 30%</td>
<td>Heterocyclic compound</td>
<td></td>
</tr>
<tr>
<td>1 - 5%</td>
<td>Metal oxide</td>
<td></td>
</tr>
<tr>
<td>5 - 10%</td>
<td>beta-Cyfluthrin</td>
<td>68359-37-5</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**General advice:** Take off all contaminated clothing immediately.

**If inhaled:** Remove to fresh air. If symptoms persist, call a physician.

**In case of skin contact:** After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

**In case of eye contact:** In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**If swallowed:** If swallowed, seek medical advice immediately and show this container or label.

**Contact Number:** Use the Bayer Emergency Number in Section 1

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Any
Specific hazards during fire fighting: Fire may cause evolution of: Carbon monoxide Carbon dioxide (CO2)

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Methods for cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Additional advice: Avoid dust formation.

Further Accidental Release Notes

Avoid dust formation.

7. HANDLING AND STORAGE

Handling:
Avoid dust formation. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

Take measures to prevent the build up of electrostatic charge. Keep away from open flames, hot surfaces and sources of ignition.

Storage:
Storage temperature: 0 - 100 °F (-17.78 - 37.78 °C)

8. EXPOSURE CONTROLS/PERSOONAL PROTECTION

Metal oxide
US. ACGIH Threshold Limit Values
Time Weighted Average (TWA): 10 mg/m3
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
PEL: 15 mg/m3 (Total dust.)
US. ACGIH Threshold Limit Values
Hazard Designation: Not classifiable as a human carcinogen.

Respiratory protection:
Recommended Filter type: HEPA

**Hand protection:**
Chemically resistant gloves.

**Eye protection:**
Safety glasses

**Other protective measures:**
Wear suitable protective equipment.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>purple</td>
</tr>
<tr>
<td>Odour:</td>
<td>Slight aromatic</td>
</tr>
<tr>
<td>Melting point:</td>
<td>no data available</td>
</tr>
<tr>
<td>Density:</td>
<td>no data available</td>
</tr>
<tr>
<td>Bulk density:</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Water solubility:</td>
<td>no data available</td>
</tr>
<tr>
<td>pH:</td>
<td>no data available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>no data available</td>
</tr>
<tr>
<td>(n-octanol/water):</td>
<td>no data available</td>
</tr>
<tr>
<td>Solubility in organic solvents:</td>
<td>no data available</td>
</tr>
<tr>
<td>Ignition temperature:</td>
<td>no data available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Conditions to avoid:** no data available

**Materials to avoid:** Oxidizing agents

**Hazardous reactions:** None known.

**Thermal decomposition:**
no data available

**Hazardous decomposition products:**
Carbon monoxide, Carbon dioxide (CO2)
11. TOXICOLOGICAL INFORMATION

Other information on toxicity:
Metal oxide
As with any nuisance dust, long-term exposure to concentrations of dust above the recommended exposure level may overload lung clearance mechanism and cause adverse lung effects.

Acute oral toxicity:
Heterocyclic compound
LD50 rat: 6,150 mg/kg

Metal oxide
LD50 rat: > 20,000 mg/kg

beta-Cyfluthrin
LD50 rat, male: 84 - 380 mg/kg
LD50 rat, female: 77 - 651 mg/kg

Acute inhalation toxicity:
Metal oxide
LC50 rat: > 6.8 mg/l, 4 h

beta-Cyfluthrin
LC50 rat: 0.08 mg/l, 4 h
LC50 rat: 0.53 mg/l, 4 h

Acute dermal toxicity:
Heterocyclic compound
LD50 rabbit: 200 mg/kg

Metal oxide
LD50 rabbit: > 10,000 mg/kg

Skin irritation:
Metal oxide
TiO2 pigments are not irritant but as with all fine powders can adsorb moisture and natural oils from the surface of the skin during prolonged exposure.

beta-Cyfluthrin
rabbit
Result: slight irritation

Eye irritation:
Metal oxide
possibly mechanical irritation

beta-Cyfluthrin
rabbit
Result: Slightly irritating
12. ECOLOGICAL INFORMATION

General advice:
Do not allow to enter surface waters or groundwater.

Toxicity to fish:
Metal oxide
static test: LC0 > 1,000 mg/l
Test species: Leuciscus idus (Golden orfe) Duration of test: 48 h
static test: LC0 > 1,000 mg/l
Test species: Phoxinus phoxinus (Eurasian minnow) Duration of test: 30 d
static test: LC0 3 mg/l
Test species: Coregonus autumnalis migratorius G. (Omul) Duration of test: 30 d
Acute Fish toxicity: LC50 240 - 370 mg/l
Test species: Sheepshead minnow (Cyprinodon variegatus) Duration of test: 96 h

Toxicity to daphnia and other aquatic invertebrates:
Metal oxide
static test EC0 > 3 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 30 d
LC50 300 - 400 mg/l
Test species: Mysidopsis almyra (Opposum shrimp) Duration of test: 96 h
Reproduction Test EC100 500 mg/l
Test species: Daphnia magna (Water flea) Duration of test: 30 d

Toxicity to bacteria:
Metal oxide
EC0 > 10,000 mg/l
tested on: Pseudomonas fluorescens
Duration of test: 24 h
> 5,000 mg/l
tested on: Escherichia coli

Biodegradability:
Metal oxide
Pigments are practically not biodegradable.
13. DISPOSAL CONSIDERATIONS

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION

Land transport (DOT)
Non-Regulated

Inland waterway transport
Non-Regulated

Railway transport
Non-Regulated

Sea transport (IMDG)
Non-Regulated

Air transport (ICAO / IATA cargo aircraft only)
Non-Regulated

Air transport (ICAO / IATA passenger and cargo aircraft)
Non-Regulated

15. REGULATORY INFORMATION

US. Toxic Substances Control Act
This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)
Components
None

SARA Section 311/312 Hazard Categories
Immediate Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

Components
Heterocyclic compound
beta-Cyfluthrin

US. EPA CERCLA Hazardous Substances (40 CFR 302)

None

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

Weight percent Components CAS-No.
1 - 5% Metal oxide

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists

Weight percent Components CAS-No.
10 - 30% Heterocyclic compound

California Prop. 65

To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

OSHA Hazcom Standard Rating Hazardous

16. OTHER INFORMATION

NFPA 704M Rating

<table>
<thead>
<tr>
<th>Factor</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

0=Insignificant  1=Slight  2=Moderate  3=High  4=Extreme

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.