SAFETY DATA SHEET
Credo D
Version 1.1 Revision Date 01/05/2011

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

Product information
Product Name: Credo D
MSDS Number: 122000007369

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

CAUTION! Form: liquid
May cause skin irritation. May cause eye irritation.

Hazard Communication (29CFR 1910.1200)
No Carcinogenic substances as defined by IARC, NTP and/or OSHA

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>Imidacloprid</td>
<td>138261-41-3</td>
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<tr>
<td>7 - 13%</td>
<td>Polyhydric alcohol</td>
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</table>
4. FIRST AID MEASURES

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

**If inhaled:** Remove to fresh air. Call a physician immediately.

**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:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable extinguishing media:** High volume water jet

**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:** Cover spilt product with liquid-binding material (sand, silica gel, acid binder, universal binder, hybilat). Take up mechanically and fill into labelled, closable containers.

**Additional advice:** Keep away from/remove sources of ignition.

**Further Accidental Release Notes**

Keep away from/remove sources of ignition.
7. HANDLING AND STORAGE

Handling:
Avoid formation of aerosol. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Polyhydric alcohol
US. ACGIH Threshold Limit Values
Time Weighted Average (TWA): 10 mg/m³ (Mist.)
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
PEL: 5 mg/m³ (Respirable fraction.)
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
PEL: 15 mg/m³ (Total dust.)

Respiratory protection:
Recommended Filter type: Organic vapor with prefilter

Hand protection:
Chemically resistant gloves.

Eye protection:
Safety glasses

Other protective measures:
Wear suitable protective equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Density: no data available
Vapour pressure: no data available
Viscosity, dynamic: no data available
Miscibility with water: no data available
pH: no data available
Partition coefficient (n-octanol/water): no data available
Ignition temperature: not determined
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

**Acute oral toxicity:**
LD50 rat, female: 623 mg/kg

**Acute inhalation toxicity:**
LC50 rat, male: 1.097 mg/l

LC50 rat, female: 0.51 - 2.05 mg/l

**Acute dermal toxicity:**
LD50 rat: > 2,000 mg/kg

**Skin irritation:**
rabbit
Result: slight irritation

**Eye irritation:**
rabbit
Result: Moderate eye irritation

**Sensitisation:**
guinea pig
Result: Non-sensitizer

**Genotoxicity in vitro:**
Imidacloprid
Ames test
Result: negative

**Pharmacetic effects:**
Imidacloprid
Insecticide
12. ECOLOGICAL INFORMATION

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

Toxicity to fish:
Imidacloprid
Acute Fish toxicity: LC50  280 mg/l
Test species: Cyprinus carpio (Carp)  Duration of test: 96 h

Acute Fish toxicity: LC50  211 mg/l
Test species: Oncorhynchus mykiss (rainbow trout)  Duration of test: 96 h

Acute Fish toxicity: LC50  237 mg/l
Test species: Leuciscus idus (Golden orfe)  Duration of test: 96 h

Polyhydric alcohol
Acute Fish toxicity: LC50 >  5,000 mg/l
Test species: Carassius auratus (goldfish)  Duration of test: 24 h

Acute Fish toxicity: LC100  51,000 - 57,000 mg/l
Test species: Oncorhynchus mykiss (rainbow trout)  Duration of test: 96 h

Acute Fish toxicity: LC50 >  250 mg/l
Test species: Leuciscus idus (Golden orfe)  Duration of test: 48 h

Toxicity to daphnia and other aquatic invertebrates:
Imidacloprid
EC50 85 mg/l
Test species: Daphnia magna (Water flea)  Duration of test: 48 h

EC50 0.055 mg/l
Test species: Hyalella azteca  Duration of test: 96 h

LC50 0.0552 mg/l
Test species: Chironomus Riparius (non-biting midge)  Duration of test: 24 h

Polyhydric alcohol
EC50 > 10,000 mg/l
Test species: Daphnia magna (Water flea)  Duration of test: 24 h

EC0 > 500 mg/l
Test species: Daphnia magna (Water flea)  Duration of test: 24 h

Toxicity to algae:
Imidacloprid
EC50 > 100 mg/l
tested on: Pseudokirchneriella subcapitata (green algae)  Duration of test: 72 h

EC50 > 10 mg/l
tested on: Desmodesmus subspicatus (Green algae)  Duration of test: 72 h
**Toxicity to bacteria:**
Imidacloprid
EC50 > 10,000 mg/l
tested on: activated sludge micro-organism
Method: OECD TG 209

**Bioaccumulation:**
Imidacloprid

Low potential for bioaccumulation

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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.

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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

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15. **REGULATORY INFORMATION**

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
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
None

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components
None

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists

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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

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.