1. Product and Company Identification

Company
BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1
CANADA

24 Hour Emergency Response Information
CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

PCP # 30884 / 30685
Synonyms: Pyraclostrobin + Triticonazole + Metalaxyl

2. Hazards Identification

Emergency overview

CAUTION:
KEEP OUT OF REACH OF CHILDREN.

State of matter: liquid
Colour: red
Odour: faint odour, sweetish

Potential health effects

Acute toxicity:

Irritation / corrosion:
May cause slight irritation to the skin. May cause slight but temporary irritation to the eyes.

Sensitization:
Caused skin sensitization in animal studies.

Potential environmental effects

Aquatic toxicity:
Very toxic (acute effect) to aquatic organisms.

3. Composition / Information on Ingredients

Not WHMIS controlled.
4. First-Aid Measures

**General advice:**
First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**If inhaled:**
Remove the affected individual into fresh air and keep the person calm.

**If on skin:**
Rinse skin immediately with plenty of water for 15 - 20 minutes.

**If in eyes:**
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

**If swallowed:**
Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Have person sip a glass of water if able to swallow.

**Note to physician**
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

**Flash point:**
No flash point - Measurement made up to the boiling point.

**Autoignition:**
409 °C

**Lower explosion limit:**
not determined

**Upper explosion limit:**
not determined

**Self-ignition temperature:**
not self-igniting

**Suitable extinguishing media:**
foam, dry powder, carbon dioxide, water spray

**Hazards during fire-fighting:**
carbon monoxide, carbon dioxide, nitrogen oxides
If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released in case of fire.

**Protective equipment for fire-fighting:**
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
Evacuate area of all unnecessary personnel. Contain contaminated water/ firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

**Personal precautions:**
Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.
Environmental precautions:
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Cleanup:
Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Handling
General advice:
Handle in accordance with good industrial hygiene and safety practice. No special measures necessary if stored and handled correctly.

Protection against fire and explosion:
The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Storage
General advice:
Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.

Storage incompatibility:
General advice: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

Temperature tolerance
Protect from temperatures below: 0 °C
Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.
Protect from temperatures above: 40 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls and Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Advice on system design:
Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment
Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or
Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

**Hand protection:**
Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

**Eye protection:**
Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

**Body protection:**
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

**General safety and hygiene measures:**
Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>suspension</td>
</tr>
<tr>
<td>Odour</td>
<td>faint odour, sweetish</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available.</td>
</tr>
<tr>
<td>Colour</td>
<td>red</td>
</tr>
<tr>
<td>pH value</td>
<td>6.8</td>
</tr>
<tr>
<td>Boiling point</td>
<td>100 °C</td>
</tr>
<tr>
<td>Density</td>
<td>1.071 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not determined</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow):</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>not determined</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>dispersible</td>
</tr>
</tbody>
</table>

### 10. Stability and Reactivity

**Conditions to avoid:**

**Substances to avoid:**
strong acids, strong bases, strong oxidizing agents

**Hazardous reactions:**
The product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

**Decomposition products:**
No hazardous decomposition products if stored and handled as prescribed/indicated. Prolonged thermal loading can result in products of degradation being given off.

**Thermal decomposition:**
Possible thermal decomposition products:
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released. To avoid thermal decomposition, do not overheat.

**Oxidizing properties:**
Not an oxidizer.

### 11. Toxicological information

#### Acute toxicity

**Oral:**
- Type of value: LD50
- Species: rat (female)
- Value: > 2,000 mg/kg

**Inhalation:**
- Type of value: LC50
- Species: rat (male/female)
- Value: > 5.8 mg/l
- Exposure time: 4 h

**Dermal:**
- Type of value: LD50
- Species: rat (male/female)
- Value: > 5,000 mg/kg

#### Irritation / corrosion

**Skin:**
- Species: rabbit
- Result: non-irritant

**Eye:**
- Species: rabbit
- Result: non-irritant

**Sensitization:**
- Mouse Local Lymph Node Assay (LLNA)
- Species: mouse
- Result: sensitizing

#### Genetic toxicity

*Information on: pyraclostrobin*

*Information on: Triticonazole*
No mutagenic effect was found in various tests with microorganisms and mammalian cell culture. The substance was not mutagenic in a test with mammals.

*Information on: metalaxyl*
No mutagenic effects reported.

#### Carcinogenicity

*Information on: pyraclostrobin*

*Information on: Triticonazole*
In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

*Information on: metalaxyl*
In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.
Reproductive toxicity

Information on: pyraclostrobin
Information on: Triticonazole
Animal studies gave no indication of a fertility impairing effect at doses which were not toxic to the parental animals.
Information on: metalaxyl
The results of animal studies gave no indication of a fertility impairing effect.

Development:

Information on: pyraclostrobin
Information on: Triticonazole
The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals.
Information on: metalaxyl
Causes developmental effects in animals at high, maternally toxic doses.

12. Ecological Information

Fish

Information on: Pyraclostrobin
Acute:
OPP 72-1 (EPA-Guideline) static
Cyprinus carpio/LC50 (96 h): > 0.0121 - < 0.0258 mg/l
EPA 72-1 static
Lepomis macrochirus/LC50 (96 h): > 0.0131 - < 0.0299 mg/l
The statement of the toxic effect relates to the analytically determined concentration.
EPA 72-1 Flow through.
Oncorhynchus mykiss/LC50 (96 h): 0.00616 mg/l

Information on: Triticonazole
Acute:
Oncorhynchus mykiss/LC50 (96 h): > 3.6 mg/l

Information on: metalaxyl
Acute:
Oncorhynchus mykiss/LC50 (96 h): > 100 mg/l

Aquatic invertebrates

Information on: Pyraclostrobin
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): 0.016 mg/l

Information on: Triticonazole
Acute:
Daphnia magna/EC50 (48 h): 9.0 mg/l

Information on: metalaxyl
Acute:
Daphnia magna/LC50: 29 mg/l

Aquatic plants
Information on: Pyraclostrobin
Toxicity to aquatic plants:
OECD Guideline 201 green algae/EC50 (96 h): > 0.843 mg/l

Information on: Triticonazole
Toxicity to aquatic plants:
Skeletonema costatum/EC50 (120 h): 0.31 mg/l
Skeletonema costatum/No observed effect concentration (120 h): 0.031 mg/l

Information on: metalaxyl
Toxicity to aquatic plants:
Algae/EC50: 1 mg/l = 140 ppm
Common duckweed/EC50: 92 ppm

----------------------------------

13. Disposal considerations

Waste disposal of substance:
Must be disposed of or incinerated in accordance with local regulations.

Container disposal:
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
TDG
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical                   DSL, CA released; restriction on quantity / not listed
Crop Protection           DSL, CA released / exempt

WHMIS does not apply to this product.
THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.
16. Other Information

Recommended use: fungicide

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com
BASF HOTLINE (800) 454 – COPE (2673)
MSDS Prepared on: 2013/01/21

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET