

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2012/04/20  
Version: 2.1

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### 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)

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Molecular formula:	C <sub>19</sub> H <sub>18</sub> N <sub>3</sub> O <sub>4</sub> Cl
Chemical family:	crop protection product, fungicide, Emulsifiable concentrate (EC)
PCP # 27322	
Synonyms:	pyraclostrobin

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### 2. Hazards Identification

Emergency overview

DANGER:  
POISON.  
DANGER:  
CAUSES SKIN IRRITATION.  
Causes eye irritation.  
KEEP OUT OF REACH OF CHILDREN.  
Avoid contact with the skin, eyes and clothing.

State of matter: liquid  
Colour: dark yellow  
Odour: faint odour, aromatic

Potential health effects

**Acute toxicity:**

Moderately toxic after single ingestion. Relatively nontoxic after short-term inhalation. Slightly toxic after short-term skin contact.

**Irritation / corrosion:**

Causes substantial but temporary eye injury. May cause moderate irritation to the skin.

**Sensitization:**

Skin sensitizing effects were not observed in animal studies.

Potential environmental effects

**Aquatic toxicity:**

Very toxic (acute effect) to aquatic organisms.

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### Terrestrial toxicity:

With high probability not acutely harmful to terrestrial organisms.

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
175013-18-0	>= 15.0 - <= 40.0 %	Pyraclostrobin
91-20-3	>= 5.0 - <= 10.0 %	naphthalene
104-76-7	>= 1.0 - <= 5.0 %	2-ethylhexan-1-ol

### 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:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

#### If on skin:

Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

#### If in eyes:

Hold eyelids open to facilitate rinsing. Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek medical advice.

#### If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

#### Note to physician

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

### 5. Fire-Fighting Measures

Flash point:	98 °C	(DIN EN 22719; ISO 2719)
Autoignition:	475 °C	(Directive 92/69/EEC, A.15)
Lower explosion limit:		not determined
Upper explosion limit:		not determined
Flammability:	not determined	

#### Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

#### Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrogen chloride, halogenated hydrocarbons, Hydrocarbons,

If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

#### Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

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### Further information:

In case of fire and/or explosion do not breathe fumes. 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.

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## 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.

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## 7. Handling and Storage

### Handling

#### General advice:

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas.

#### 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

The product can crystallize below the limit temperature.

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.

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## 8. Exposure Controls and Personal Protection

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

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### Components with workplace control parameters

naphthalene	OSHA ACGIH	PEL 10 ppm 50 mg/m3 ; TWA value 10 ppm ; STEL value 15 ppm ; Skin Designation ; The substance can be absorbed through the skin.
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### **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) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. 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, Suitable materials, rubber, plastic

#### **Eye protection:**

Tightly fitting safety goggles (chemical goggles).

#### **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. Wash soiled clothing immediately.

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## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	faint odour, aromatic	
Odour threshold:	No data available.	
Colour:	dark yellow	
pH value:	6.4	
crystal separation:	approx. 0 °C	
onset of boiling:	approx. 180 °C	Information applies to the solvent.
Vapour pressure:	0.053 hPa	
Density:	approx. 1.06 g/cm3	( 20 °C)
Vapour density:		not determined
Viscosity, dynamic:	8.8 mPa.s	( 40 °C)
	approx. 17.5	( 20 °C)
	mPa.s	
Solubility in water:		emulsifiable
Molar mass:	387.3 g/mol	

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## 10. Stability and Reactivity

### **Conditions to avoid:**

Avoid sources of ignition. Avoid electro-static discharge. Avoid direct sunlight.

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**Substances to avoid:**

Nitric Acid, Sulfuric acid, strong oxidizing agents

**Hazardous reactions:**

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

**Decomposition products:**

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

**Thermal decomposition:**

not determined

**Corrosion to metals:**

Corrosive effects to metal are not anticipated.

**Oxidizing properties:**

not fire-propagating

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## 11. Toxicological information

**Acute toxicity****Oral:**

Type of value: LD50  
Species: rat  
Value: approx. 500 mg/kg

Type of value: LD50  
Species: rat (female)  
Value: 200 - 500 mg/kg

Type of value: LD50  
Species: rat (male)  
Value: > 500 mg/kg  
Moderately toxic.

**Inhalation:**

Type of value: LC50  
Species: rat  
Value: 3.51 mg/l  
Exposure time: 4 h

**Dermal:**

Type of value: LD50  
Species: rat  
Value: > 4,000 mg/kg

**Sensitization:**

modified Buehler test  
Species: guinea pig  
Result: Skin sensitizing effects were not observed in animal studies.

**Genetic toxicity**

*Information on: pyraclostrobin*  
*No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.*

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**Carcinogenicity**

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

*Information on: pyraclostrobin*  
*The results of animal studies gave no indication of a fertility impairing effect.*  
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### Development:

*Information on: pyraclostrobin*  
*No indications of a developmental toxic / teratogenic effect were seen in animal studies.*  
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### Other Information:

Misuse can be harmful to health.

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## 12. Ecological Information

### Fish

Acute:  
Oncorhynchus mykiss/LC50 (96 h): 0.02 mg/l  
Oryzias latipes/LC50 (96 h): > 0.058 - < 0.1 mg/l

### Aquatic invertebrates

Acute:  
Daphnia magna/EC50 (48 h): 0.0649 mg/l

### Aquatic plants

Toxicity to aquatic plants:  
green algae/EC50 (72 h): 3.32 mg/l

### Degradability / Persistence Biological / Abiological Degradation

Evaluation: Not readily biodegradable (by OECD criteria).

### Other adverse effects:

Do not discharge product into the environment without control.

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## 13. Disposal considerations

**Waste disposal of substance:**  
See product label for disposal and recycling instructions.

**Container disposal:**  
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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### 14. Transport Information

#### Land transport

TDG

Not classified as a dangerous good under transport regulations

#### Sea transport

IMDG

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Marine pollutant: YES  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(contains SOLVENT NAPHTHA, PYRACLOSTROBIN 23%)

#### Air transport

IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3082  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(contains SOLVENT NAPHTHA, PYRACLOSTROBIN 23%)

### 15. Regulatory Information

#### Federal Regulations

##### Registration status:

Crop Protection DSL, CA released / exempt

Chemical DSL, CA released; restriction on quantity / not listed

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.

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END OF DATA SHEET