

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16  
Version: 1.0

Page: 1/7  
(30256998/SDS\_CPA\_CA/EN)

### 1. Product and Company Identification

Use: crop protection product, fungicide

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)

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, emulsion concentrate (EC)  
PCP# 27322  
Synonyms: pyraclostrobin

### 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:**  
Harmful if swallowed.

**Irritation / corrosion:**  
Irritating to eyes, respiratory system and skin.

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
91-20-3	5.0 - 10.0 %	naphthalene

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16

Page: 2/7

Version: 1.0

(30256998/SDS\_CPA\_CA/EN)

64742-94-5	30.0 - 60.0 %	solvent naphtha
91-57-6	10.0 - 30.0 %	Naphthalene, 2-methyl-
90-12-0	5.0 - 10.0 %	Naphthalene, 1-methyl-

### 4. First-Aid Measures

**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)

**Suitable extinguishing media:**

foam, dry powder, carbon dioxide, water spray

**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.

### 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.

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16  
Version: 1.0

Page: 3/7  
(30256998/SDS\_CPA\_CA/EN)

### **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:**

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

### **Storage**

#### **Storage incompatibility:**

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

#### **Storage stability:**

Storage duration: 36 Months

---

## 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) 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:**

Wash soiled clothing immediately.

---

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16  
Version: 1.0

Page: 4/7  
(30256998/SDS\_CPA\_CA/EN)

### 9. Physical and Chemical Properties

Form:	liquid	
Odour:	faint odour, aromatic	
Odour threshold:	No data available.	
Colour:	dark yellow	
pH value:	approx. 6.2 6.4	( 10 g/l, 20 °C)
crystal separation:	approx. 0 °C	
onset of boiling:	approx. 180 °C	Information applies to the solvent.
Vapour pressure:	0.053 hPa	
Density:	1.055 g/cm <sup>3</sup>	( 20 °C)
Viscosity, dynamic:	8.8 mPa.s approx. 17.5 mPa.s	( 40 °C) ( 20 °C)
Solubility in water:		emulsifiable
Molar mass:	387.3 g/mol	

### 10. Stability and Reactivity

#### Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage.

#### Substances to avoid:

strong oxidizing agents

#### 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.

#### Corrosion to metals:

Corrosive effects to metal are not anticipated.

#### Oxidizing properties:

not fire-propagating

### 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

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16  
Version: 1.0

Page: 5/7  
(30256998/SDS\_CPA\_CA/EN)

### 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.*  
-----

### Carcinogenicity

*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.*  
-----

### Reproductive toxicity

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

### Development:

*Information on: pyraclostrobin*  
-----

---

## 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

*Information on: pyraclostrobin*

*Degree of elimination: 0 - 10 % (28 d)*

*Information on: solvent naphtha*

*Test method: OECD 301F; ISO 9408; 92/69/EEC, C.4-D (aerobic), activated sludge, domestic*

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16  
Version: 1.0

Page: 6/7  
(30256998/SDS\_CPA\_CA/EN)

*Method of analysis:* BOD of COD  
*Degree of elimination:* 50 - 60 % (28 d)  
*Evaluation:* Not readily biodegradable (by OECD criteria).  
*Evaluation:* Poorly biodegradable.  
Not readily biodegradable (by OECD criteria).  
Moderately/partially biodegradable.  
-----

### Bioaccumulation

*Information on: Pyraclostrobin*

*Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.*  
-----

---

## 13. Disposal considerations

### Waste disposal of substance:

See product label for disposal and recycling instructions.

---

## 14. Transport Information

Reference Bill of Lading

---

## 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

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

# Safety Data Sheet

## HEADLINE 250 EC

Revision date : 2011/02/16

Version: 1.0

Page: 7/7

(30256998/SDS\_CPA\_CA/EN)

msds@basf.com

MSDS Prepared on: 2011/02/16

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 BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES 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