

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03

Page: 1/9

Version: 4.0

(59021555/SDS\_CPA\_CA/EN)

### 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: C19 H18 Cl N3 O4  
PCP # 27323  
Synonyms: pyraclostrobin

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### 2. Hazards Identification

Emergency overview

**CAUTION:**  
Harmful if swallowed.  
Avoid contact with the skin, eyes and clothing.

State of matter: solid  
Colour: grey-brown  
Odour: faint odour, smoky

Potential health effects**Acute toxicity:**

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

**Irritation / corrosion:**

May cause slight but temporary irritation to the eyes. May cause slight 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.

**Terrestrial toxicity:**

With high probability not acutely harmful to terrestrial organisms.

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 2/9  
(59021555/SDS\_CPA\_CA/EN)

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
175013-18-0	19.992 %	Pyraclostrobin
112926-00-8	>= 19.0 - <= 21.0 %	Silica gel, precipitated, crystalline free
1332-58-7	>= 5.0 - <= 8.0 %	Kaolin

### 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**

Antidote: No known specific antidote.  
Treatment: Treat symptomatically.

### 5. Fire-Fighting Measures

Flash point:	not applicable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Flammability:	not highly flammable (Directive 92/69/EEC, A.10)
Self-ignition temperature:	296 °C (Directive 92/69/EEC, A.16)

#### **Suitable extinguishing media:**

dry powder, foam, water spray

#### **Unsuitable extinguishing media for safety reasons:**

carbon dioxide

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 3/9  
(59021555/SDS\_CPA\_CA/EN)

### **Hazards during fire-fighting:**

carbon monoxide, carbon dioxide, ammonia, nitrogen dioxide, nitrogen oxide, Hydrogen chloride, halogenated hydrocarbons, Ammonium sulphate, Hydrocarbons, acid halides

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

### **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.

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## 6. Accidental release measures

### **Personal precautions:**

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Avoid dust formation.

### **Environmental precautions:**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

### **Cleanup:**

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. 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:**

Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. The substance/ product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

#### **Protection against fire and explosion:**

Dust can form an explosive mixture with air. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### **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 foods and animal feeds.

#### **Temperature tolerance**

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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# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 4/9  
(59021555/SDS\_CPA\_CA/EN)

### 8. Exposure Controls and Personal Protection

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

#### Components with occupational exposure limits

Kaolin	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 2 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.

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

### 9. Physical and Chemical Properties

Form:	low dusting fine granules	
Odour:	faint odour, smoky	
Odour threshold:	No data available.	
Colour:	grey-brown	
pH value:	approx. 5 - 7	( 1 %(m), 20 °C)
<i>Information on: pyraclostrobin</i>		
melting range:	63.7 - 65.2 °C	
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Vapour pressure:		negligible
Density:	approx. 1.68 g/cm3	( 20 °C) (OECD Guideline 109)
Bulk density:	approx. 615 - 702 kg/m3	
Vapour density:		not determined
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, dynamic:		not applicable

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 5/9  
(59021555/SDS\_CPA\_CA/EN)

Solubility in water: dispersible  
Molar mass: 387.83 g/mol

### 10. Stability and Reactivity

**Dust explosion class:**

Dust explosion class 1 (Kst-value >0 up to 200 bar m s-1) (St 1)

**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. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

**Substances to avoid:**

strong acids, strong bases, 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.

**Thermal decomposition:**

Possible thermal decomposition products:

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

Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.

**Oxidizing properties:**

Based on its structural properties the product is not classified as oxidizing. (Directive 92/69/EEC, A.17)

### 11. Toxicological information

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

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

Type of value: LD50

Species: rat (male/female)

Value: > 2,000 mg/kg (OECD Guideline 401)

**Inhalation:**

Type of value: LC50

Species: rat

Value: 4.7 mg/l

Exposure time: 4 h

Type of value: LC50

Species: rat

Value: 18.8 mg/l

Exposure time: 1 h

**Dermal:**

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 6/9  
(59021555/SDS\_CPA\_CA/EN)

Type of value: LD50  
Species: rat  
Value: > 2,000 mg/kg

### Irritation / corrosion

#### Skin:

Species: rabbit  
Result: non-irritant  
Method: OECD Guideline 404

Species: rabbit  
Result: Slightly irritating.  
Method: Primary skin irritation test

#### Eye:

Species: rabbit  
Result: non-irritant  
Method: OECD Guideline 405

#### Sensitization:

Buehler test  
Species: guinea pig  
Result: Skin sensitizing effects were not observed in animal studies.  
Method: OECD Guideline 406

### Repeated dose toxicity

*Information on: Pyraclostrobin*  
*Assessment of repeated dose toxicity:*  
*After repeated exposure the prominent effect is local irritation. The substance may cause damage to the olfactory epithelium after repeated inhalation.*  
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### Genetic toxicity

*Information on: Pyraclostrobin*  
*No mutagenic effect was found in various tests with microorganisms and mammalian cell culture. The substance was not mutagenic in a test with mammals.*  
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### 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.*  
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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*  
*Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.*  
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### Other Information:

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 7/9  
(59021555/SDS\_CPA\_CA/EN)

Misuse can be harmful to health.

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## 12. Ecological Information

### Fish

Acute:  
OECD Guideline 203 static  
Cyprinus carpio/LC50 (96 h): 0.25 mg/l

### Aquatic invertebrates

Acute:  
OECD Guideline 202, part 1 static  
Daphnia magna/EC50 (48 h): 0.0382 mg/l

### Aquatic plants

Toxicity to aquatic plants:  
OECD Guideline 201 green algae/EC50 (72 h): 17.39 mg/l  
  
OECD Guideline 201 green algae/EC50 (72 h): 1.4 mg/l

### Bioaccumulation

*Information on: Pyraclostrobin*  
*OECD-Guideline 305*  
*Rainbow trout Bioconcentration factor 379 - 507*  
*Accumulation in organisms is not to be expected.*  
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### Environmental mobility:

*Information on: Pyraclostrobin*  
*Assessment transport between environmental compartments:*  
*Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.*  
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### Other adverse effects:

Do not discharge product into the environment without control.

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## 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.

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## 14. Transport Information

Land transport  
TDG

# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 8/9  
(59021555/SDS\_CPA\_CA/EN)

Not classified as a dangerous good under transport regulations

### Sea transport IMDG

Hazard class: 9  
Packing group: III  
ID number: UN 3077  
Hazard label: 9, EHSM  
Marine pollutant: YES  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains PYRACLOSTROBIN)

### Air transport IATA/ICAO

Hazard class: 9  
Packing group: III  
ID number: UN 3077  
Hazard label: 9, EHSM  
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(contains PYRACLOSTROBIN)

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Crop Protection	DSL, CA	released / listed
Chemical	DSL, CA	blocked / not listed
Biocide	DSL, CA	blocked / 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.

### SDS Prepared by:

BASF NA Product Regulations

BASF HOTLINE (800) 454 – COPE (2673)  
SDS Prepared on: 2013/05/03



# Safety Data Sheet

## CABRIO® 20 EG

Revision date : 2013/05/03  
Version: 4.0

Page: 9/9  
(59021555/SDS\_CPA\_CA/EN)

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