



We create chemistry

Safety Data Sheet

CABRIO PLUS

Revision date : 2015/01/14
Version: 3.0

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(30520825/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)

PCP # 30395
Synonyms: Metiram; Pyraclostrobin

2. Hazards Identification

Emergency overview

Skin Irritant
WARNING:
POISON.
Contains the allergen soy.
Eye irritant.
KEEP OUT OF REACH OF CHILDREN.
HARMFUL IF SWALLOWED.
May be fatal if swallowed.
May cause eye irritation.
May cause skin irritation.
Do not get in eyes, on skin, or on clothing.
Wash thoroughly after handling.

State of matter: solid
Colour: brown
Odour: aromatic

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 moderate irritation to the skin. May cause moderate but temporary irritation to the eyes.

Sensitization:
There is no evidence of a skin-sensitizing potential.

Chronic toxicity:

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Carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Reproductive toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Genotoxicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Signs and symptoms of overexposure:

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

Potential environmental effects

Aquatic toxicity:

Very toxic (acute effect) to aquatic organisms.

3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
9006-42-2	55.0 %	metiram
175013-18-0	5.0 %	Pyraclostrobin

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician

Treatment:

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

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5. Fire-Fighting Measures

Flash point:

Lower explosion limit:

not applicable

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:

approx. 199 °C

(Directive 92/69/EEC, A.16)

Suitable extinguishing media:

dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:

carbon dioxide

Hazards during fire-fighting:

carbon monoxide, Hydrogen chloride, carbon dioxide, nitrogen oxides, sulfur oxides, organochloric compounds
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 drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

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. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

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Protection against fire and explosion:

Avoid dust formation. Dust can form an explosive mixture with air. 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: 30 °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.

Components with occupational exposure limits

Silica gel, precipitated, crystalline free OSHA PEL TWA value 6 mg/m³ ; TWA value 0.8 mg/m³ ;
The exposure limit is calculated from the equation, 80/(%SiO₂), using a value of 100% SiO₂. Lower percentages of SiO₂ will yield higher exposure limits.
TWA value 20 millions of particles per cubic foot of air ;

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.

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9. Physical and Chemical Properties

Form:	granules
Odour:	aromatic
Odour threshold:	No data available.
Colour:	brown
pH value:	approx. 5 - 7
onset of melting:	> 120 °C
Boiling point:	The product is a non-volatile solid.
Vapour pressure:	not applicable
Density:	approx. 1.67 g/cm ³ approx. 1.663 g/cm ³
Vapour density:	not applicable
Viscosity, dynamic:	not applicable, the product is a solid
Solubility in water:	dispersible
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. 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:

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:

150 °C, 2.5 K/min (DSC (OECD 113))

Oxidizing properties:

not fire-propagating (Directive 92/69/EEC, A.17)

11. Toxicological information

Acute toxicity**Oral:**

Type of value: LD50
Species: rat (male/female)
Value: > 500 - < 2,000 mg/kg (OECD Guideline 423)

Inhalation:

Type of value: LC50
Species: rat (male/female)
Value: > 5.6 mg/l (OECD Guideline 403)
Exposure time: 4 h

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Dermal:

Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Irritation / corrosion

Skin:

Species: rabbit
Result: Irritant.
Method: OECD Guideline 404

Eye:

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

Sensitization:

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

Repeated dose toxicity

Information on: metiram

Assessment of repeated dose toxicity:
Repeated oral exposure may affect certain organs.

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.

Information on: Silicon dioxide

Assessment of repeated dose toxicity:
Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.
Repeated oral uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other Information:

Misuse can be harmful to health.

12. Ecological Information

Fish

Information on: Metiram

Acute:
Oncorhynchus mykiss/LC50 (96 h): 1.1 mg/l
Cyprinus carpio/LC50 (96 h): 85 mg/l

Information on: pyraclostrobin

Acute:
Cyprinus carpio/LC50 (96 h): > 0.0121 - < 0.0258 mg/l
Lepomis macrochirus/LC50 (96 h): > 0.0196 - < 0.0335 mg/l
Oncorhynchus mykiss/LC50 (96 h): 0.00616 mg/l

Aquatic invertebrates

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Information on: Metiram

Acute:

Daphnia magna/EC50 (48 h): 2.55 mg/l

Information on: pyraclostrobin

Acute:

Daphnia magna/EC50 (48 h): 0.0157 mg/l

Aquatic plants

Information on: Metiram

Toxicity to aquatic plants:

green algae/EC50 (96 h): 0.3 mg/l

Information on: pyraclostrobin

Toxicity to aquatic plants:

green algae/EC50 (96 h): > 0.843 mg/l

Bioaccumulation

Information on: metiram

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Information on: Pyraclostrobin

OECD-Guideline 305

Rainbow trout Bioconcentration factor 379 - 507

Accumulation in organisms is not to be expected.

Environmental mobility:

Information on: metiram

Assessment transport between environmental compartments:

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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.

Other adverse effects:

Do not discharge product into the environment without control.

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

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 METIRAM, PYRACLOSTROBIN)

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 METIRAM, 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 METIRAM, PYRACLOSTROBIN)

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

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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: 2015/01/14

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