

Safety Data Sheet

HONOR FUNGICIDE

Revision date : 2016/06/16
Version: 1.1

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(30471129/SDS_CPA_CA/EN)

1. Identification

Product identifier used on the label

HONOR FUNGICIDE

Recommended use of the chemical and restriction on use

Recommended use*: fungicide

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

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

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Molecular formula: C₁₈ H₁₂ Cl₂ N₂ O ; C₁₉ H₁₈ Cl N₃ O₄
Chemical family: strobilurine, carboxylic acid amide
PCP # 32329
Synonyms: pyraclostrobin + boscalid

2. Hazards Identification

According to Controlled Products Regulations (CPR) (SOR/88-66)

Emergency overview

WARNING:
POISON.
KEEP OUT OF REACH OF CHILDREN.
Harmful if swallowed.
Wash thoroughly after handling.

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3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
188425-85-6	11.2 %	Boscalid
175013-18-0	16.8 %	Pyraclostrobin
1332-58-7	<= 5.0%	Kaolin
7783-20-2	15.0 - 20.0%	Ammonium sulphate
577-11-7		sodium-di-ethyl-hexyl-sulfosuccinate
112926-00-8	15.0 - 20.0%	Silica gel, precipitated, crystalline free

4. First-Aid Measures

Description of 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.

Most important symptoms and effects, both acute and delayed

Symptoms: 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.

Indication of any immediate medical attention and special treatment needed

Note to physician

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam, water spray

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Unsuitable extinguishing media for safety reasons:
carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, Hydrogen chloride, carbon dioxide, nitrogen oxides, organochloric compounds, sulfur oxides

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental release measures

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with the skin, eyes and clothing. Remove contaminated clothes, undergarments and shoes immediately.

Environmental precautions

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

Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

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.

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.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

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Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight. Keep in a cool, well-ventilated place.
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/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	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 10 mg/m3 Total dust ; TWA value 5 mg/m3 Respirable fraction ;
	ACGIH TLV	TWA value 2 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.
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, $80/(\%SiO_2)$, using a value of 100% SiO ₂ . Lower percentages of SiO ₂ 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) particulate respirator.

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:

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

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9. Physical and Chemical Properties

Form:	solid, granules	
Odour:	almost odourless	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	light brown	
pH value:	approx. 5 - 7 (1 %(m), 25 °C)	
Melting point:	The product has not been tested.	
Flash point:	not applicable, the product is a solid	
Flammability:	not highly flammable	(Directive 84/449/EEC, A.10)
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.	
Bulk density:	approx. 558 kg/m ³ (24.6 °C)	
Vapour density:	not applicable	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Self-ignition temperature:	approx. 328 °C	(Directive 92/69/EEC, A.16)
Thermal decomposition:	230.6 °C, 84 kJ/kg Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
Viscosity, dynamic:	not applicable, the product is a solid	
Solubility in water:	dispersible	
Evaporation rate:	not applicable	

10. Stability and Reactivity

Reactivity

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

Oxidizing properties:
not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

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

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

strong oxidizing agents, strong acids, strong bases

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Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

230.6 °C

Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50

Species: rat (female)

Value: > 500 - < 2,000 mg/kg

Inhalation

Type of value: LC50

Species: rat (male/female)

Value: > 5.2 mg/l

Exposure time: 4 h

Dermal

Type of value: LD50

Species: rat (male/female)

Value: > 2,000 mg/kg

No mortality was observed.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

Skin

Species: rabbit

Result: non-irritant

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Eye

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

Sensitization

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

modified Buehler test

Species: rabbit
Result: Non-sensitizing.
Method: OECD Guideline 406

Chronic Toxicity/Effects

Repeated dose toxicity

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

Genetic toxicity

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

Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Kaolin

Assessment of carcinogenicity: The American Conference of Governmental Industrial Hygienists (ACGIH) has classified this substance as Group A4 - Not classifiable as human carcinogen.

Reproductive toxicity

Assessment of reproduction 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

Assessment of 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.

Other Information

Misuse can be harmful to health.

Symptoms of Exposure

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.

12. Ecological Information

Toxicity

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Aquatic toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish

Information on: pyraclostrobin

LC50 (96 h) 0.0062 mg/l, *Oncorhynchus mykiss* (EPA 72-1, Flow through.)

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

LC50 (96 h) approx. 2.7 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates

Information on: pyraclostrobin

EC50 (48 h) 0.016 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

EC50 (48 h) 5.33 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)

Aquatic plants

Information on: pyraclostrobin

EC50 (96 h) > 0.843 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201)

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

EC50 (96 h) 3.75 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201)

EC50 (96 h) 1.8 mg/l (growth rate), *Navicula pelliculosa* (OECD Guideline 201)

No observed effect concentration (96 h) 0.14 mg/l (growth rate), *Navicula pelliculosa* (OECD Guideline 201)

Chronic toxicity to fish

Information on: pyraclostrobin

No observed effect concentration (98 d) approx. 0.00235 mg/l, *Oncorhynchus mykiss* (OECD Guideline 210, Flow through.)

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

No observed effect concentration (97 d) 0.116 mg/l, *Oncorhynchus mykiss*

Chronic toxicity to aquatic invertebrates

Information on: pyraclostrobin

No observed effect concentration (21 d) 0.004 mg/l, *Daphnia magna*

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

Persistence and degradability

Assessment biodegradation and elimination (H2O)

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The product has not been tested. The statement has been derived from the properties of the individual components.

Assessment biodegradation and elimination (H2O)

Information on: pyraclostrobin

Not readily biodegradable (by OECD criteria).

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulation potential

Information on: pyraclostrobin

*Bioconcentration factor: 379 - 507, Oncorhynchus mykiss (OECD-Guideline 305)
Accumulation in organisms is not to be expected.*

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

*Bioconcentration factor: 57 - 70 (28 d), Oncorhynchus mykiss
Does not accumulate in organisms.*

Mobility in soil

Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pyraclostrobin

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

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide

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

Additional information

Other ecotoxicological advice:

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.

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 3077
Hazard label: 9, EHS
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, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(contains PYRACLOSTROBIN)

15. Regulatory Information

Federal Regulations

Registration status:

Crop Protection DSL, CA released / exempt

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

According to Controlled Products Regulations (CPR) (SOR/88-66)

WHMIS does not apply to this product.

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16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2016/06/16

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.

END OF DATA SHEET