1. Identification

Product identifier used on the label

Pristine WG Fungicide

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, 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 CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Contact address: BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1
CANADA
Telephone: +1 289 360-1300

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Molecular formula: C18 H12 Cl2 N2 O ; C19 H18 Cl N3 O4
Chemical family: crop protection product, fungicide, water dispersible granules
PCP # 27985/28961
Synonyms: pyraclostrobin + boscalid

2. Hazards Identification

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

Classification of the product

<table>
<thead>
<tr>
<th>Classification</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>4 (oral)</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Eye Dam./Irrit.</td>
<td>2B</td>
<td>Serious eye damage/eye irritation</td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>1</td>
<td>Hazardous to the aquatic environment - acute</td>
</tr>
</tbody>
</table>
Aquatic Chronic Combustible Dust 1 Combustible Dust (1) Combustible Dust

Hazardous to the aquatic environment - chronic Combustible Dust

Label elements

Pictogram:

![Exclamation Mark]

Signal Word: Warning

Hazard Statement:
- May form combustible dust concentration in air.
  
  H320 Causes eye irritation.
  
  H302 Harmful if swallowed.
  
  H400 Very toxic to aquatic life.
  
  H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):
- P273 Avoid release to the environment.
- P270 Do not eat, drink or smoke when using this product.
- P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330 Rinse mouth
- P391 Collect spillage.
- P337 + P311 If eye irritation persists: Call a POISON CENTER or physician.

Precautionary Statements (Disposal):
- P501 Dispose of contents and container to hazardous or special waste collection point.

3. Composition / Information on Ingredients

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

bosalid (ISO): 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide
  
  CAS Number: 188425-85-6
  
  Content (W/W): 25.2 %
  
  Synonym: No data available.

Pyraclostrobin
  
  CAS Number: 175013-18-0
  
  Content (W/W): 12.8 %
  
  Synonym: Carbamic acid, [2-[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl]methoxy-, methyl ester

Kaolin
  
  CAS Number: 1332-58-7
  
  Content (W/W): 3.0 - 5.0%
**4. First-Aid Measures**

**Description of 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. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product.

**If inhaled:**
Keep patient calm, remove to fresh air, seek medical attention. If not breathing, give artificial respiration.

**If on skin:**
Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Seek medical attention.

**If in eyes:**
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

**If swallowed:**
Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

**Most important symptoms and effects, both acute and delayed**

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

**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:
water spray, dry powder, foam
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, sulfur oxides, organochloric compounds, silica compounds
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:
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, protective equipment and emergency procedures
Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

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
Avoid raising dust. Sweep/shovel up. 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

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. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight. Protect from temperatures above: 40 °C
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**

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin</td>
<td>PEL 5 mg/m³ Respirable fraction ; PEL 15 mg/m³ Total dust ; TWA value 5 mg/m³ Respirable fraction ; TWA value 10 mg/m³ Total dust ;</td>
<td>TWA value 2 mg/m³ Respirable fraction ; The value is for particulate matter containing no asbestos and &lt;1% crystalline silica.</td>
</tr>
</tbody>
</table>

**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 a NIOSH approved (or equivalent) particulate respirator if ventilation is inadequate to control dust.

**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.

9. Physical and Chemical Properties

**Form:** granules, extrudates

**Odour:** moderate odour, smoky

**Odour threshold:** Not determined due to potential health hazard by inhalation.
10. Stability and Reactivity

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

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

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

**Possibility of hazardous reactions**
The product is chemically stable.
Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

**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.

**Incompatible materials**
strong acids, strong bases, strong oxidizing agents

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

Thermal decomposition:
150 °C, 2 K/min (DSC (OECD 113))

No decomposition if stored and handled as prescribed/indicated.

### 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**

**Oral**
Type of value: LD50
Species: rat
Value: approx. 1,490 mg/kg

**Inhalation**
Type of value: LC50
Species: rat
Value: > 5.4 mg/l
Exposure time: 4 h
No mortality was observed.

**Dermal**
Type of value: LD50
Species: rat
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: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. May cause slight irritation to the eyes. Not irritating to the skin.

**Eye**
Species: rabbit
Result: Slightly irritating.
Method: OECD Guideline 405

**Sensitization**
Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

modified Buehler test
Species: guinea pig
Result: Non-sensitizing.

**Aspiration Hazard**
No aspiration hazard expected. The product has not been tested. The statement has been derived from the properties of the individual components.

**Chronic Toxicity/Effects**

**Repeated dose toxicity**
Assessment of repeated dose toxicity: No known chronic effects.

*Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide*
Assessment of repeated dose toxicity: Adaptive effects were observed after repeated exposure in animal studies.

*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: Kaolin*
Assessment of repeated dose toxicity: Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.

*Information on: Silica gel, precipitated, crystalline free*
Assessment of repeated dose toxicity: The substance may cause damage to the lung after repeated inhalation of high doses.

**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: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide*
Assessment of carcinogenicity: In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counterpart. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

Information on: Kaolin
Assessment of carcinogenicity: Based on available Data, the classification criteria are not met. 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.

Medical conditions aggravated by overexposure
Individuals with pre-existing diseases of the respiratory system, skin or eyes may have increased susceptibility to excessive exposures.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Very toxic (acute effect) to fish. Very toxic (acute effect) to aquatic invertebrates. Acutely toxic for aquatic plants.

Toxicity to fish
LC50 (96 h) 0.042 mg/l, Oncorhynchus mykiss (OECD Guideline 203)

Aquatic invertebrates
EC50 (48 h) 0.08 mg/l, Daphnia magna (OECD Guideline 202, part 1)

Aquatic plants
ErC50 (72 h) 4.99 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)
EC10 (72 h) 1.29 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)

Chronic toxicity to fish

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

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

Chronic toxicity to aquatic invertebrates
Information on: pyraclostrobin
No observed effect concentration (21 d) 0.004 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)
The details of the toxic effect relate to the nominal concentration.
No observed effect concentration (28 d) 0.00128 mg/l, Mysidopsis bahia (OPP 72-4 (EPA-Guideline), Flow through.)
The statement of the toxic effect relates to the analytically determined concentration.

Assessment of terrestrial toxicity
With high probability not acutely harmful to terrestrial organisms.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-y1)-nicotinamide

Not readily biodegradable (by OECD criteria).

Information on: pyraclostrobin

Not readily biodegradable (by OECD criteria).

Bioaccumulative potential

Bioaccumulation potential

Information on: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-y1)-nicotinamide

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

Information on: pyraclostrobin

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

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: boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-y1)-nicotinamide

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

Information on: pyraclostrobin

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.

13. Disposal considerations

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

Container disposal:
Rinse the container or liner as needed for disposal. Add rinsate to spray tank. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. Consult the product label for additional details.

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, EHSM
Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains BOSCALID, 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 BOSCALID, PYRACLOSTROBIN)

Further information
Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 kg or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2).

15. Regulatory Information

Federal Regulations
Registration status:
Crop Protection  DSL, CA  released / listed
Chemical  DSL, CA released / listed

NFPA Hazard codes:
Health: 1  Fire: 1  Reactivity: 0  Special:

Labeling requirements under Pest Control Products Act

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:

WARNING:
Contains the allergen sulfite(s).
KEEP OUT OF REACH OF CHILDREN.
HARMFUL IF SWALLOWED.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2020/12/18

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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