

Safety data sheet

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BASF Safety Data Sheet Date / Revised: 17.03.2017 Product: **PRISTINE**®

Ref. ID no. 30277930/SDS_CPA_00/EN. Version: 1.1 (according to UN GHS 4th rev.)

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

PRISTINE®

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, fungicide.

Details of the supplier of the safety data sheet

Company:

BASF New Zealand Limited Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022 P.O. Box 407, Auckland 1140

Phone: +9 255 4300 Fax: +9 255 4307

E-mail address: reception@basf-nz.co.nz

Emergency telephone number

National Poisons Centre: 0800 764 766

BASF Emergency Advice Number: 0800 944 955 (24 Hour Advice in an Emergency Only)

2. Hazards Identification

2.1 Classification of the substance or mixture

Hazard Classification (NZ EPA) 6.1D, 6.9B, 9.1A

2.2 Label Elements

Pictogram:



Priority Identifier:

WARNING. Keep out of reach of children

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Secondary Identifiers:

Hazard Statements

H302 Harmful if swallowed.

May cause damage to liver through prolonged or repeated oral exposure at high doses.

H320 Causes eve irritation. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

To avoid risks to human health and the environment, comply with the instructions for use. Hazard determining component(s) for labelling: BOSCALID, PYRACLOSTROBIN

Other hazards

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

3. Composition/Information on Ingredients

Substances

Not applicable.

Mixtures

Chemical nature

Crop protection product, fungicide, water dispersible granules.

Hazardous ingredients

boscalid (ISO); 2-chloro-N-(4'-chloro[1,1'-biphenyl]-2-yl)-nicotinamide Content (W/W): 25.2 %

CAS Number: 188425-85-6

pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(Nmethoxy)

carbamate

Content (W/W): 12.8 % CAS Number: 175013-18-0 INDEX-Number: 613-272-00-6

Sodium alkylnaphthalenesulfonate, polymer with formaldehyde

Content (W/W): < 15 %

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

4. First-Aid Measures

Description of first aid measures

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

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

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

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

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On ingestion:

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

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Water spray, foam, dry powder.

Unsuitable extinguishing media for safety reasons: carbon dioxide.

Special hazards arising from the substance or mixture

Carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides, organochloric compounds, sulphur oxides.

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

Advice for fire-fighters

Special protective equipment:

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

Further information:

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

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

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

For large amounts: Sweep/shovel up.

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

Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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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.

APPROVED HANDLER:

Approved handlers as defined under the HSNO Act 1996 are not required for this product except during commercial use. This product must be under the control of an APPROVED HANDLER if it is being applied in a wide dispersive manner or used by a commercial contractor. Refer to the product label for handling precautions and directions for use.

TRACKING:

Not required.

RECORD KEEPING:

Records of use must be kept if 3 kg or more of this product is applied in a place where it is likely to enter air or water and leave the place.

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.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

Storage stability:

Storage duration: 24 Months

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.

Storage Site Requirements:

Stores containing more than 100 kg of this product require emergency response plans and secondary containment systems, and are subject to signage. Note: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.

AGGREGATE STORAGE VOLUME THRESHOLDS: When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.

Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	NA	100 kg	1 kg	100 kg	100 kg

* Note: Farms > 4 ha are exempt but with controls

DO NOT STORE OR LOAD WITH:	SEGREGATE FROM:
Class 1 Explosive	Foodstuffs and Food Containers

Segregation: In store separate by at least 5 metres, on transport separate by at least 3 metres, in both cases horizontally. On vehicles, a segregation device may be used: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.

Note: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

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Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

1332-58-7: Kaolin

7757-82-6: Sodium sulphate 7783-20-2: Ammonium sulphate

112926-00-8: Silica gel, precipitated, crystalline free

8061-51-6: Lignosulfonic acid, sodium salt

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

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.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form: granules, extrudates

Colour: brown

Odour: moderate odour, smoky

Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 6 – 8 (1 %(m), 20 °C) (as suspension)

melting range: approx. 50 °C
Boiling point: not applicable
Flash point: not applicable
Evaporation rate: not applicable

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.

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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.

Vapour pressure: negligible

Density: approx. 1,51 g/cm3 (20 °C) (OECD Guideline 109)

Relative vapour density (air): not applicable Solubility in water: dispersible

Partitioning coefficient

n-octanol/water (log Kow): not applicable

Self-ignition: Temperature: 328 °C (Method: Directive 92/69/EEC, A.16)
Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Viscosity, dynamic: not applicable, the product is a solid

Explosion hazard: not explosive

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

Other information

Self-heating ability: Not tested on account of the low melting-point.

Bulk density: approx. 600 kg/m3

approx. 689 kg/m3

Apparent density after tamping

10. Stability and Reactivity

Reactivity

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

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 SDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

Strong acids, strong bases, strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products:

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

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Of moderate toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data: LD50 rat (oral): approx. 1.490 mg/kg

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LC50 rat (by inhalation): > 5,4 mg/l 4 h LD50 rat (dermal): > 2.000 g/kg No mortality was observed.

Irritation

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.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: Slightly irritating. (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:

modified Buehler test guinea pig: Non-sensitizing.

Germ cell mutagenicity

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.

<u>Carcinogenicity</u>

Assessment of 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.

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.

Developmental toxicity

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.

Specific target organ toxicity (repeated exposure)

Assessment of STOT single:

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

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

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Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

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 repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-

yloxymethyl]phenyl}(N-methoxy)carbamate

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.

Aspiration hazard

No aspiration hazard expected.

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

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

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:

EC50 (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)

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

No observed effect concentration (97 d) 0,116 mg/l, Oncorhynchus mykiss

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate

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Chronic toxicity to fish:

No observed effect concentration (98 d) approx. 0,00235 mg/l, Oncorhynchus mykiss (OECD Guideline 210, Flow through.)

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-

yloxymethyl]phenyl}(N-methoxy)carbamate

Chronic toxicity to aquatic invertebrates:

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.

Persistence and degradability

Assessment biodegradation and elimination (H2O):

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 biodegradation and elimination (H2O):

Not readily biodegradable (by OECD criteria).

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-

yloxymethyl]phenyl}(N-methoxy)carbamate

Assessment biodegradation and elimination (H2O):

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.

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

Bioaccumulation potential:

Bioconcentration factor: 57 - 70 (28 d), Oncorhynchus mykiss

Does not accumulate in organisms.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3yloxymethyl]phenyl}(N-methoxy)carbamate

Bioaccumulation potential:

Bioconcentration factor: 379 - 507, Oncorhynchus mykiss (OECD-Guideline 305)

Accumulation in organisms is not to be expected.

Mobility in soil (and other compartments if available)

Assessment transport between environmental compartments:

Adsorption in soil: 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 transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore

contamination of groundwater is not expected.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3yloxymethyl]phenyl}(N-methoxy)carbamate

Assessment transport between environmental compartments:

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

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Waste treatment methods

Container

Triple rinse empty container and add residue to the spray tank. Recycle the rinsed container through Agrecovery (0800 247 326, www.agrecovery.co.nz).

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

Product:

Dispose of this product only by using according to the label or at an approved landfill or at an approved facility. DO NOT burn product. DO NOT contaminate water with product or used container.

14. Transport Information

Commercial transport:

Classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA):

UN number: UN3077

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(contains BOSCALID, PYRACLOSTROBIN)

Transport hazard class(es): 9, EHSM

Packing group: III
Environmental hazards: Yes
Marine pollutant: Yes
HAZCHEM: 2[Z]

Public transport:

Do NOT carry this product on a passenger service vehicle.

UN number

See corresponding entries for "UN number" for the respective regulations in the tables above.

UN proper shipping name

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See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

Transport in bulk according to Annex II of MARPOL and the IBC Code

Regulation: Not evaluated Shipment approved: Not evaluated Pollution name: Not evaluated Not evaluated Ship Type: Not evaluated Not evaluated

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

For the user of this plant-protective product applies:

To avoid risks to man and the environment, comply with the instructions for use.

NZ Regulations

Approved pursuant to the HSNO Act 1996, HSR007853.

See www.epa.govt.nz for approval controls.

Registered pursuant to the ACVM Act 1997, P7595.

See www.foodsafety.govt.nz for registration conditions.

Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

16. Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the products properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left-hand margin indicate an amendment from the previous version.