We create chemistry

Safety Data Sheet
PPCT 2013 Purple Biofungicide

1. Identification

Product identifier used on the label

PPCT 2013 Purple Biofungicide

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, Biological beneficial agent

* 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

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Substance number:	832664
Registration number:	EPA Registration number: 71840-20
Synonyms:	Bacillus amyloliquefaciens + Bacillus Simplex

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Skin Sens.	1	Skin sensitization
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

Label elements

Pictogram:

Signal Word:
Warning

Hazard Statement:

H317	May cause an allergic skin reaction.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves.
P261	Avoid breathing mist or vapour or spray.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

Labeling of special preparations (GHS):
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Bacillus amyloliquefaciens MBI600 (live bacterial spore) [EXT]
Content (W/W): 0.244 %
Synonym: MBI600

Mica-group minerals
CAS Number: 12001-26-2
Content (W/W): >= 7.0 - < 10.0%
Synonym: Mica

Titanium dioxide
CAS Number: 13463-67-7
Content (W/W): >= 3.0 - < 5.0%
Synonym: C.I. Pigment White 6

Polyethylene wax
CAS Number: 9002-88-4

Content (W/W): >= 1.0 - < 5.0%
Synonym: Poly(ethylene)

glycerol
CAS Number: 56-81-5
Content (W/W): >= 1.0 - < 3.0%
Synonym: 1,2,3-Propanetriol; Glycerol

bronopol
CAS Number: 52-51-7
Content (W/W): > 0.0 - < 0.1%
Synonym: 2-Bromo-2-nitro-1,3-propanediol; Bronopol

5-chloro-2-methyl-2H-isothiazol-3-one
CAS Number: 26172-55-4
Content (W/W): > 0.0 - < 0.1%
Synonym: 5-Chlor-2-methyl-4-isothiazolin-3-on

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: 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
Hazards: 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, carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, Hydrogen chloride, hydrogen bromide, nitrogen oxides, sulfur oxides, halogenated compounds, metal 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:
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. 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

Do not breathe vapour/spray. 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

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

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:
No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

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

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.
Protect from temperatures below: 2 °C
Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.
Protect from temperatures above: 25 °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

glycerol	OSHA Z1:	PEL 15 mg/m3 Total dust ;
	OSHA Z1:	PEL 5 mg/m3 Respirable fraction ;
Mica-group minerals	OSHA Z3:	TWA value 20 millions of particles per cubic foot of air ;
	ACGIH, US:	TWA value 0.1 mg/m3 Respirable fraction ;
	OSHA Z1:	PEL 15 mg/m3 Total dust ;
	OSHA Z1:	PEL 5 mg/m3 Respirable fraction ;
	NIO ID, US:	IDLH 1,500 mg/m3 ; IDLH values based on the 1994 Revised Criteria
Titanium dioxide	ACGIH, US:	TWA value 2.5 mg/m3 Respirable finescale particles ;
	ACGIH, US:	TWA value 0.2 mg/m3 Respirable nanoscale particles ;
	OSHA Z1:	PEL 15 mg/m3 Total dust ;
	NIO ID, US:	IDLH 5,000 mg/m3 ; IDLH values based on the 1994 Revised Criteria
Polyethylene wax	OSHA Z1:	PEL 5 mg/m3 Respirable fraction ;
	OSHA Z1:	PEL 15 mg/m3 Total dust ;

Personal protective equipment
RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) 21C air purifying respirator equipped with high efficiency particulate filter (HEPA) when particulates may be generated. 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:
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

Form:	liquid
Odour:	characteristic
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	No data available.
pH value:	The product has not been tested.
Melting point:	< 0 °C
Boiling point:	approx. 100 °C
Flash point:	A flash point determination is unnecessary due to the high water content.
Flammability:	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.
Autoignition:	Based on the water content the product does not ignite.
Vapour pressure:	approx. 23 hPa (20 °C) The statements are based on the properties of the individual components.
Density:	approx. 1.13 g/cm3 (20 °C)

Vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	approx. 1 mPa.s (20 °C) Information applies to the solvent.
Particle size:	The substance / product is marketed or used in a non solid or granular form.
Solubility in water:	dispersible
Evaporation rate:	not applicable
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

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 SDS section 7 - Handling and storage.

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

Oral
Type of value: LD50
Species: rat (female)
Value: > 5,000 mg/kg
No mortality was observed.

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 2.43 mg/l
No mortality was observed.

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 5,000 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: Skin contact causes slight irritation. Not irritating to the eyes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Skin
Species: rabbit
Result: Slightly irritating.

Eye
Species: rabbit
Result: non-irritant

Sensitization
Assessment of sensitization: Sensitization after skin contact possible. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: 1,2-benzisothiazol-3(2H)-one
Guinea pig maximization test
Species: guinea pig
Result: skin sensitizing
Method: OECD Guideline 406

Information on: mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: skin sensitizing
Method: other

Aspiration Hazard
not applicable

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.

Information on: bronopol
Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.

Information on: mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
Assessment of repeated dose toxicity: Based on available data, the classification criteria are not met. After repeated exposure the prominent effect is local irritation.

Information on: Titanium dioxide
Assessment of repeated dose toxicity: Repeated oral uptake of the substance did not cause substance-related effects. The substance may cause increase in lung mass and lung tissue changes after repeated inhalation.

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

Information on: bronopol
Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was mutagenic in various cell culture test systems; however, these results could not be confirmed in tests with mammals.

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

Information on: Titanium dioxide
Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.

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.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Harmful 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: bronopol
LC50 (96 h) 11 mg/l, Lepomis macrochirus (OECD 203; ISO 7346; 84/449/EWG, C.1, Flow through.)

Aquatic invertebrates

Information on: bronopol
EC50 (48 h) 1.4 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants

Information on: bronopol
EC50 (72 h) 0.0073 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
EC10 (72 h) 0.0048 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)
EC50 (72 h) 0.178 mg/l (growth rate), Skeletonema costatum (ISO/DIS 10253, static)
No observed effect concentration (72 h) 0.052 mg/l (growth rate), Skeletonema costatum (ISO/DIS 10253, static)

Information on: mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)
No observed effect concentration (72 h) 0.00199 mg/l (growth rate), Skeletonema costatum (OECD Guideline 201, static)
The statement of the toxic effect relates to the analytically determined concentration.
EC50 (72 h) 0.00049 mg/l (growth rate), Skeletonema costatum (OECD Guideline 201, static)
The statement of the toxic effect relates to the analytically determined concentration.

Persistence and degradability

Assessment biodegradation and elimination (H2O)
not applicable

Bioaccumulative potential

Assessment bioaccumulation potential
not applicable

Mobility in soil

Assessment transport between environmental compartments
not applicable

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:
Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container disposal:
Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US

Contains non-registered, non-listed substance.
Individual registration may be required.
40 CFR 721 Subpt. E

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK	CAS Number	Chemical name
NJ	56-81-5	glycerol
	12001-26-2	Mica-group minerals
	13463-67-7	Titanium dioxide
PA	56-81-5	glycerol
	12001-26-2	Mica-group minerals
	13463-67-7	Titanium dioxide

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

Labeling requirements under FIFRA

This chemical is a pesticide product regulated by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.
CAUTION:
Causes moderate eye irritation.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2025/01/27

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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