



Safety Data Sheet

Preparation Date 30-May-2023

Revision date 30-May-2023

Revision Number: 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Identification of the product

Product Description BACIX

Other means of identification

Internal SDS code BLAS-20230530

Registration number(s) 93505-1-70506

Recommended use of the chemical and restrictions on use

Recommended use Fungicide. Agricultural applications.

Uses advised against Non labeled activities

Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL NA Inc.
630 Freedom Business Center
Suite 402
King of Prussia, PA 19406

Emergency telephone number

Company Phone Number 1-800-438-6071

Emergency telephone number Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
Medical: Rocky Mountain Poison and Drug Safety (866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health under the OSHA 2012 HazCom

Appearance powder

Physical state solid

Odor Characteristic

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

- Contains Bacillus subtilis. May produce an allergic reaction.
- To protect aquatic organisms/non-target plants/non-target arthropods/insects respect an untreated buffer zone of 5 meters from

water points for all uses in the open field and under open shelter at time of treatment.

3. Composition/information on Ingredients

Chemical name	CAS No	Weight-%
Bacillus subtilis (strain IAB/BS03)	NOT APPLICABLE	2

The product contains no substances which at their given concentration, are considered to be hazardous to health under the OSHA 2012 HazCom

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

2% (min 2 X 10⁸ CFU/g* * CFU : colony forming units.

4. First aid measures

FIRST AID MEASURES

Eye contact	Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. If symptoms persist, call a physician.
Skin contact	Rinse skin immediately with plenty of water for 15-20 minutes. If skin irritation persists, call a physician.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and Effects no data available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician No information available. Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Product is not flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use employ polyvalent powder extinguisher (ABC powder).

Unsuitable extinguishing media no data available.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Protective equipment and precautions for firefighters

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Environmental Precautions

Environmental precautions Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and material for containment and cleaning up

Methods for Clean-Up Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Avoid contact with skin, eyes and clothing. Wear personal protective equipment.

Conditions for safe storage, including any incompatibilities

Storage Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Store in a dry place and/or in closed container. Keep containers tightly closed in a cool, well-ventilated place. Keep at temperatures below 30 °C.

incompatible materials Strong acids.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering controls Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Personal protective equipment**Eye/Face Protection**

Avoid contact with eyes. Safety glasses with side-shields. Goggles.

Skin protection

Long sleeved clothing. Long pants. Chemical resistant gloves. waterproof gloves. Socks and footwear.

Respiratory protection

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134. Suitable mask with particle filter P3 (European Norm 143).

General hygiene considerations

Avoid contact with skin, eyes and clothing.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	powder
Physical state	solid
Odor	Characteristic
color	white

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	6	Approximately
Melting point/freezing point		None known
Boiling Point/Range		None known
Flash Point	No information available	None known
Evaporation Rate		None known
Flammability (solid, gas)		None known
Specific gravity		None known
Bulk density		None known
Water solubility		None known
Solubility in Other Solvents	No information available	None known
Partition coefficient: n-octanol/water		None known
Autoignition temperature		None known
Decomposition temperature		None known
Viscosity		None known

9.2 OTHER INFORMATION- NONE

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

None under normal processing.

incompatible materials

Strong acids.

Hazardous decomposition products

None under normal use conditions. Thermal decomposition can lead to release of irritating gases and vapours. Carbon oxides. Organic materials.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information	BACIX Acute oral LD50 (rat) >5,000 mg/kg Acute dermal LD50 (rat) >2,000 mg/kg Acute inhalation LC50 (rat) Data not available Eye and skin - Non -irritant Sensitization Not a sensitizer
Inhalation	Based on available data, the classification criteria are not met.
Eye contact	Based on available data, the classification criteria are not met.
Skin contact	Based on available data, the classification criteria are not met.

Ingestion Based on available data, the classification criteria are not met.

Information on Toxicological Effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Mutagenic effects no data available.
Carcinogenicity There are no known carcinogenic chemicals in this product.
Reproductive effects Not Available.
STOT - Single Exposure no data available.
STOT - Repeated Exposure no data available.
Aspiration hazard No information available.

Numerical Measures of Toxicity - See above

12. Ecological Information

ecotoxicity

BACIX
 Acute oral LD50 (Japanese quail) >5,000 mg/kg
 Acute toxicity LC50 (Common carp) >100 mg/l
 Acute toxicity LC50 (Daphnia magna) >100 mg/l
 Acute reproduction toxicity (Daphnia magna EC50 (21 days) 7.85 mg/l

Persistence/Degradability

Biodegradable.

Bioaccumulation/ Accumulation

Does not bioaccumulate. This product does not meet the criteria for persistent, bio-accumulative and toxic (PBT) / very persistent and very bio-accumulative (VpVb) substances.

Other Adverse Effects

no data available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal Method Dispose of in accordance with local regulations.

Contaminated packaging Refer to product label.

14. Transport Information

DOT

NOT REGULATED

TDG

NOT REGULATED

IATA NOT REGULATED

IMDG NOT REGULATED

15. Regulatory Information

International Inventories

USINV	Not present
DSL/NDSL	Not present
EINECS/ ELINCS	Not Present
ENCS	Not Present
China	Not Present
KECL	Not Present
PICCS	Not Present
AICS	Not Present
TSCA	Not Present

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CERCLA

Not applicable

CERCLA

SARA Product RQ 0

RCRA

Pesticide Information

State Regulations

California Proposition 65 This product does not contain any Proposition 65 chemicals

State Right-to-Know

International regulations

U.S. EPA Label information

EPA Pesticide registration number 93505-1-70506

16. Other Information

NFPA **HEALTH 1** **flammability 0** **Instability 0** **Physical hazard -**

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Revision Summary

Add to system

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End of SDS