

Safety Data Sheet

Section 1: Identification

Product identifier **FFN: 00183**

Product Name • **Bloomtime™ Biological FD Biopesticide**
 • EPA Reg No 73771-2

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

Recommended use • Microbial Product – For Organic Production

Details of the supplier of the safety data sheet

Manufacturer • Verdesian Life Sciences, U.S., LLC
 1001 Winstead Drive, Suite 480
 Cary, NC 27513

Telephone (General) • 1-800-868-6446

Emergency telephone number

Manufacturer • InfoTrac: 1-352-323-3500 - (International)

Manufacturer • InfoTrac: 1-800-535-5053 - (North America)

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Not classified.
 May form combustible dust concentrations in air during processing.

Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

Other hazards

OSHA HCS 2012 • This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Pantoea agglomerans E-325	No CAS No assigned	7.0%	NDA	OSHA HCS 2012: Not Classified	NDA
Other ingredients	N/A	93.0%	NDA	OSHA HCS 2012: Comb. Dust	NDA

Section 4: First-Aid Measures

Description of first aid measures

- GENERAL ADVICE** Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact InfoTrac at 1-800-535-5053 for emergency medical treatment information.
- IF INHALED** • 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.
- IF IN EYES** • Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- IF ON SKIN** • Take off contaminated clothing. Rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
- IF SWALLOWED** • Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician** • All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media** • LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO₂, water spray or regular foam.
- Unsuitable Extinguishing Media** • No data available.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards** • Material is non-combustible and is not expected to pose a fire or explosion hazard. May form combustible dust concentrations in air during processing.

Hazardous Combustion Products • No data available.

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions • Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact.

Emergency Procedures • Keep unauthorized personnel away.

Environmental precautions

- Avoid run off to waterways and sewers. Do not contaminate water when disposing of equipment washwaters or rinsate.

Methods and material for containment and cleaning up

Containment/Clean-up Measures • Avoid generating dust.
SMALL DRY SPILLS: With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.
LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading.

Section 7 - Handling and Storage

Precautions for safe handling

Handling • Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Use only in well ventilated areas. Use good safety and industrial hygiene practices. Do not apply in combination with any other agricultural products.

Wear appropriate personal protective equipment, avoid direct contact. Avoid breathing dust. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Conditions for safe storage, including any incompatibilities

Storage • Bloomtime must be kept in the original package at temperatures between -4° F (-20° C) and 40° F (4.4° C), frozen or refrigerated. Carry-over should be kept in a frozen state at 20° F (-7° C). Keep container closed when not in use. All containers of this product must be properly labeled. Store containers in a cool, dry location, away from direct sunlight, incompatible materials, sources of intense heat, or where freezing is possible. Do not contaminate water, food or feed by storage or disposal.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines • No applicable exposure limits available for product or components.

Exposure controls

Engineering

Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory

- NIOSH approved respirator with any N, R, P or HE filter.

Eye/Face

- Wear safety goggles.

Skin/Body

- Wear long-sleeved shirt, long pants, coveralls, shoes plus socks and water-proof gloves.

Environmental

Exposure Controls

- Follow best practice for site management and disposal of waste. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions are available, use detergent and hot water for washables. Keep and wash PPE separately from other laundry.

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Light yellow powder with no odor.
Color	Light yellow.	Odor	Odorless
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	No data available	Water Solubility	No data available
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization not indicated.

Conditions to avoid

- Keep away from heat, sparks and open flame. Minimize dust generate and accumulation.

Incompatible materials

- None known.

Hazardous decomposition products

- None known.

Section 11 - Toxicological Information

Information on toxicological effects

Components	
Components of this product are not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.	
GHS Properties	Classification
Acute toxicity	OSHA HCS 2012•No data available
Aspiration Hazard	OSHA HCS 2012•No data available
Carcinogenicity	OSHA HCS 2012•No data available
Germ Cell Mutagenicity	OSHA HCS 2012•No data available
Skin corrosion/Irritation	OSHA HCS 2012•No data available
Skin sensitization	OSHA HCS 2012•No data available
STOT-RE	OSHA HCS 2012•No data available
STOT-SE	OSHA HCS 2012•No data available
Toxicity for Reproduction	OSHA HCS 2012•No data available
Respiratory sensitization	OSHA HCS 2012•No data available
Serious eye damage/Irritation	OSHA HCS 2012•No data available

Potential Health Effects

Inhalation

Acute (Immediate) • Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible.

Chronic (Delayed) • No data available

Skin

Acute (Immediate) • Exposure to dust may cause mechanical irritation.

Chronic (Delayed) • No data available.

Eye

Acute (Immediate)

- Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed)

- No data available.

Key to abbreviations

LD = Lethal Dose

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- Non-mandatory section - information about this substance not complied for this reason.

Persistence and degradability

- Non-mandatory section - information about this substance not complied for this reason.

Bioaccumulative potential

- Non-mandatory section - information about this substance not complied for this reason.

Mobility in Soil

- Non-mandatory section - information about this substance not complied for this reason.

Other adverse effects

- Non-mandatory section - information about this substance not complied for this reason.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Packaging waste

- Nonrefillable container. Do not reuse or refill this container. Completely empty bag into application equipment. Then dispose of bag in a sanitary landfill by incineration or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user

• None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Section 15 - Regulatory Information

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION. KEEP OUT OF REACH OF CHILDREN. PRECAUTIONARY STATEMENTS – AGRICULTURAL USE. HAZARDS TO HUMANS & DOMESTIC ANIMALS. Harmful if inhaled. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

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

SARA Hazard Classifications • None

TSCA Inventory

This product is exempted from TSCA because it is solely for FIFRA regulated use.

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

None listed

U.S. - OSHA - Specifically Regulated Chemicals

None listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

None listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

None listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

None listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

None listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

None listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

None Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

None listed

U.S. - California - Proposition 65 - Developmental Toxicity

None listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

None listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

None listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

None listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

None listed

Section 16 - Other Information

Last Revision Date

- 4-Nov-2015

Preparation Date

- 4-Nov-2015

Disclaimer/Statement of Liability

- The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key to abbreviations

NDA = No data available

END OF DATA SHEET