

BioBoost[®]+

ENHANCED FORMULATION

Extended Label

Dual Action Soybean Inoculant

A sterilized liquid carrier containing a minimum of 4×10^9 viable *Bradyrhizobium japonicum* and 2×10^7 viable *Delftia acidovorans* per ml.

For on seed and in-furrow treatment

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

Package Sizes Available	On-Seed Application Rate	In-Furrow Application Rates	
	2.4 fl oz per 100 lb of seed (71 ml per 45.4 kg)	4.8 fl oz (142 ml) per acre	11.9 fl oz (352 ml) per hectare
1 x 400 - 480 fl oz (14.2 L)	Treats 20,000 pounds of soybean seed	Treats 100 acres	Treats 40 hectares
1 x 200 - 240 fl oz (7.1 L)	Treats 10,000 pounds of soybean seed	Treats 50 acres	Treats 20 hectares
4 x 50 - 240 fl oz (7.1 L) 4 - 60 fl oz (1.77 L) bladders per case	Treats 10,000 pounds of soybean seed Each bladder treats 2,500 pounds of soybean seed	Treats 50 acres Each bladder treats 12.5 acres	Treats 20 hectares Each bladder treats 5 hectares

On-Seed Application Method

- Ensure seed treatment equipment has been properly calibrated.
- Shake well to achieve uniform suspension of the product. Bacterial settling is normal.
- Apply 2.4 fl oz (71 ml) of BioBoost+ Enhanced per 100 lb (45.4 kg) of seed.
- Protect BioBoost+ Enhanced inoculated seed from direct sunlight or hot, drying winds.
- Plant inoculated seed within 30 days on bare seed for best results. Apply with BioProtector Add-It[®] to extend this period of time.
- Over-application of BioBoost+ Enhanced could cause lodging or bridging of the seed in the planter box.
- Gently stir seed before planting to permit airflow and to prevent seed clumping.
- In fields with no recent history of soybean production (less than 3 years), the use of an in-furrow *Bradyrhizobium japonicum* inoculant in addition to BioBoost+ Enhanced is recommended. Consult your agricultural inputs supplier for recommendations specific to your farm.
- Some seed treatments may be harmful to the inoculants. A compatibility test should be conducted prior to use with other seed treatments.
- Do not mix with caustic fertilizers or pesticides.

In-Furrow Application Method

- Ensure the tank and application methods are clean.
- Shake the bladder to uniformly suspend the *Bradyrhizobium japonicum* and *Delftia acidovorans*.
- Apply the inoculant with a minimum of 5 US gallons (20 liters) of clean, non-chlorinated water per acre.
- Calibrate the application equipment for the correct total volume of diluted product.
- Apply product directly on the seed within the furrow.
- Once mixed, use product within 24 hours and keep temperature below 80°F (26.7°C).
- Lallemand Plant Care recommends using an on-seed inoculant along with an in-furrow application.
- In-furrow application rate of BioBoost+ Enhanced should be increased if this is the sole form of inoculant or if planting into harsh conditions.
- A compatibility test should be conducted prior to co-application with other products.
- Do not mix with caustic fertilizers or pesticides.

How it Works

The active ingredients in BioBoost+ Enhanced for soybeans are *Delftia acidovorans* and *Bradyrhizobium japonicum*. *Bradyrhizobium japonicum* is known to nodulate soybean roots and fix atmospheric nitrogen in a symbiotic relationship with the soybean plant. *Delftia acidovorans* is a plant growth promoting rhizobacteria known to enhance plant growth and yield.

Storage and Handling Recommendations

The active ingredients in BioBoost+ Enhanced are living microorganisms and require specific storage conditions to ensure viability and product performance.

- Do not store product in areas where freezing will occur, or where temperature will exceed 72°F/22°C.
- Store inoculants in a cool, dry place out of direct sunlight and wind.
- Use before expiration date stated on the package. The expiry date is valid only for unopened bags stored under cool conditions (<72°F/ 22°C).
- Open package only when ready to use. Once open, use the entire package.
- Do not store opened bags of BioBoost+ Enhanced .
- Unused BioBoost+ Enhanced should be disposed of in accordance with applicable federal, provincial or state, and municipal laws and regulatory guidelines.

Precautions

The active ingredients in BioBoost+ Enhanced are naturally occurring *Delftia acidovorans* and *Bradyrhizobium japonicum* cells. Persons allergic to bacteria should avoid using this product. If use by an allergic person is unavoidable, prevent the possibility of absorption by eye or skin contact, inhalation, or ingestion to minimize the possibility of an allergic reaction. Standard protective clothing and equipment including gloves, safety goggles and respirator are recommended while handling the product. Do not wear contact lenses while handling the product.

In case of contact with skin or eyes, immediately flush exposed areas with a continuous gentle stream of clean water. Seek medical attention if discomfort or irritation develops. Medical treatment should be based on the judgment of the physician in response to reactions of the patient.

Accidental Release

Spilled liquid may be slippery. Flush spill area with adequate water to wash away slippery residues. In case of large spill, shut off release if safe to do so. Contain spill and clean up the material for disposal.

Limited Warranty

Danstar Ferment AG / LALLEMAND PLANT CARE ("Danstar") warrants that this inoculant (the "Product"), will contain the minimum number of live cells per milliliter/gram as specified on the Product label at the time the Product is first sold by Danstar. Danstar makes no warranty as to the Product's viability or performance since the storage, use and application of the Product and growing condition are beyond the control of Danstar.

To the extent permitted by applicable law, Danstar makes no other warranties of any kind and hereby disclaims all other warranties, whether oral or written, express or implied, including without limitation, the implied warranties of the merchantability and fitness for a particular purpose and the warranty of non-infringement. Buyer of the Product assumes the risk to persons and real or personal property arising from the use, application or handling of the Product or seeds treated with the Product.

Buyer's exclusive remedy for any and all losses, injury or damages resulting from a breach of this Limited Warranty shall be, at the election of Danstar, either the price paid by buyer for the Product purchased directly from Danstar, or the replacement of such quantity of the Product. Danstar shall not be responsible for any liabilities, damages, expenses, costs or other losses, including without limitation, loss of profits suffered in connection with the use of the Product and in no event shall Danstar be liable for any incidental, consequential, special or punitive damages to the buyer or any third party.

Buyers of the Product are deemed to have accepted the terms of this Limited Warranty upon opening the container containing the Product, requesting the Product to be applied to the seed, or use of seed to which the Product has been applied, whichever is earlier. The terms of this Limited Warranty may not be varied by any oral or written agreement.

BioBoost® uses patented technology and is a registered trademark of Lallemand Plant Care.

Not a plant food product.

Not recommended for use as a fertilizer substitute.

For a list of compatible seed treatments, alternate application methods, or additional information contact:

Guaranteed by:

Danstar Ferment AG / LALLEMAND PLANT CARE
Poststrasse 30
CH-6300 Zug, Switzerland

Marketed by and distributed by:

Lallemand Inc. / LALLEMAND PLANT CARE
1620 rue Prefontaine
Montreal, H1W 2N8
Quebec, Canada

1-844-590-7781

crops@lallemand.com
crops.lallemandplantcare.com



1. IDENTIFICATION

Product name: BioBoost®+ Enhanced

Product use: Soybean seed inoculant

Supplier: Lallemand Plant Care, a business unit of Lallemand Specialties, Inc.

6120 West Douglas Avenue
Milwaukee, Wisconsin
53218
United States

Emergency phone number: 414-464-6440

2. HAZARD IDENTIFICATION

This material is not a physical, health or environmental hazard. There are no known health effects caused by the bacteria contained in this product when used according to the labeled instructions.

Potential health effects:

Eyes: Short term harmful effects are not expected. Prolonged contact may cause eye irritation.

Skin: Not likely a hazard. Prolonged contact may cause irritation. Do not expose open cuts or wounds to the product.

Inhalation: Short term harmful effects are not expected. Prolonged inhalation may lead to respiratory tract irritation.

Ingestion: Not likely a hazard. Ingestion of large quantities may be harmful.

3. COMPOSITION/INGREDIENT INFORMATION

Contains naturally-occurring *Rhizobium* and *Delftia bacteria*.

Contains no hazardous ingredients.

4. FIRST-AID MEASURES

Eye Contact First Aid: Flush immediately with plenty of water for at least 15 minutes while holding eyelids open to assure complete irrigation of eye and lid tissue. If irritation occurs or persists seek medical attention.

Skin Contact First Aid: Wash with plenty of soap and water. If irritation occurs or persists seek medical attention. Remove contaminated clothing and launder before reuse.

Inhalation First Aid: Move individual to fresh air. Seek medical attention if breathing difficulty develops.

Ingestion First Aid: Do not induce vomiting unless instructed to do so by qualified medical personnel. Unless advised otherwise dilute by drinking plenty of water. Seek medical attention if discomfort develops.

5. FIRE-FIGHTING MEASURES

Flashpoint: None

Auto-ignition Temperature: Not determined

Explosive limits: LEL: not applicable
UEL: not applicable

Extinguishing Media: Use media suitable for surrounding fire

Unusual Fire or Explosion hazards: None known

Fire Fighting Instructions: No special requirements

6. ACCIDENTAL RELEASE MEASURE

Large Spill: Contain Spill and recover for disposal

Small Spill: Spilled liquid may cause slippery residue on hard floors. Flush spill area with water to wash away and slippery residue.

7. HANDLING AND STORAGE

Storage: Store in original container in a cool, well-ventilated, dry area at temperature between 4°C and 25°C.

Handling: Avoid contact with eyes. Do not wear contact lenses while handling this product. Use in well ventilated areas. Wash thoroughly after handling. Avoid prolonged or repeated breathing of vapors. Avoid prolonged or repeated contact with skin.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: Not normally needed. If use generates an aerosol mist or respiratory irritation, use NIOSH-approved respirator. Special ventilation is not required for normal handling and use of this product when following the label requirements.

Skin Protection: Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with the liquid.

Eye Protection: Use safety goggles. DO NOT WEAR CONTACT LENSES.

Note: After handling product practice general hygiene. Wash hands and face with soap and water before smoking, drinking or eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown, translucent viscous liquid

Odor: Mild

Vapor Pressure: Not available

Vapor Density: Not available

Solubility in water: Soluble

Specific gravity: 1.0 g/cc

Melting point: Not available

PH: 6 to 8

Volatility: Not available

Color: Light brown liquid

Freezing point: -4°C

Boiling point: 102°C

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Oxides of Carbon

Incompatibility: Some fungicides/chemicals may be harmful to bacteria in this product. Please see product label for further information.

11. TOXICOLOGY INFORMATION

Oral: May cause stomach irritation.

Dermal: Not expected but may cause irritation.

Inhalation: Not expect but inhalation may cause airway irritation.

Eyes: May cause eye irritation

12. ECOLOGICAL INFORMATION

This product contains naturally-occurring soil bacteria.

13. DISPOSAL CONSIDERATIONS

Dispose of unused product and waste effluents in accordance with provincial/state and local waste disposal regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this safety data sheet. Consult local waste regulators for proper disposal.

14. TRANSPORT INFORMATION

This product is not regulated as a hazardous material for transportation within US and Canada by any means of transportation

15. REGULATORY INFORMATION

The information provided in this Material Safety Data Sheet has been compiled in good faith and is believed to be accurate. No warranty, expressed or implied regarding the completeness or continuing accuracy of the information contained herein, and Lallemand disclaims all liability

for reliance thereon. It is users responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary to comply with all Federal, Provincial or State and Local laws and regulations.

16. OTHER INFORMATION

Disclaimer: The information, data and recommendations contained in this SDS are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date of revision. The SDS serves as description of the products in regard to necessary safety measures. No warranty, expressed or implied, regarding the product described in this SDS shall be created or inferred by any statement in this SDS.