



Two-Strain Premium Furrow Spherical (FS) Granule for Soybeans

For In-Furrow application

This product has relatively high moisture content which is necessary for bacterial survival.

READ ALL DIRECTIONS BEFORE USING THIS PRODUCT

MINIMUM GUARANTEED ANALYSIS

Active Ingredients:..... <1% w/w
1 x 10⁸ CFU/g *Bradyrhizobium japonicum*

Total Inert (Other) Ingredients: Carrier..... >99% w/w

How it Works

The active ingredient in LALFIX® DUO FS for Soybeans is *Bradyrhizobium japonicum*. *Bradyrhizobium japonicum* is known to nodulate soybean roots and fix atmospheric nitrogen in a symbiotic relationship with the soybean plant. LALFIX® DUO FS for Soybeans contains two selected strains of *Bradyrhizobium* for balanced performance in different environments.

Application Directions

- Follow equipment manufacturer's calibration methods.
- Calibrate in field at time of product use.
- Reference the chart below for specific row width and suggested application rates. Application rate is 0.81 ounces (23 grams) per 1,000 feet (305 m) of row.
- Environmental conditions may affect calibration set points and overall granular flow ability. Check calibration regularly.
- Product bulk density: 31.5 lbs per cu. ft., 0.505 kg/L.
- Ensure hopper tank, metering system and delivery hoses are clean from moisture, fertilizer and pesticide residue before calibration.
- Granules should be applied directly into the seed trench furrow with the seed.
- Application rates greater than recommended are not detrimental and increased application rates may be beneficial.

Caution: If planting soybeans for the first time (virgin soil) or if any of the other adverse conditions exist; high pH soils (above 7.3), land re-entering production after Conservation Reserve Program (CRP), long rotations or crops grown in areas with marginal rainfall or arid climates, it is recommended to increase the application rate per acre of the granules or double inoculate using seed applied liquid or powder peat inoculants.

Row Width		Recommended Rate			Area Treated - acres (ha)	
in	cm	lbs/ac	kg/ac	kg/ha	Bag	Tote
6	15	4.4	2	5	6.1 (2.5)	196 (79.3)
7	18	3.8	1.7	4.3	7.1 (2.9)	227 (91.8)
8	20	3.3	1.5	3.7	8.2 (3.3)	262 (106)
9	23	3.0	1.4	3.3	9.0 (3.6)	288 (116.5)
10	25	2.7	1.2	3.0	10.0 (4.0)	320 (129.5)
12	30	2.2	1.0	2.5	12.3 (5.0)	393 (159)
15	38	1.8	0.8	2.0	15.0 (6.1)	480 (194.2)
22	56	1.2	0.5	1.4	22.5 (9.1)	720 (291.3)
30	76	0.9	0.4	1.0	30.0 (12.1)	960 (388.5)

User Tips

- Fill granular compartment in field, just before use.
- Always use seeder tank filling screens to remove any granular clumps that may have formed during storage and transport.
- Do not place granules in the same compartment as seeds, pesticides or fertilizer.
- Check/clean metering mechanisms regularly for optimal product flow ability especially under humid seeding conditions.
- Remove unused granules from tank and metering system at end of each day's planting. Do not leave granular inoculant in seeder tank overnight.
- Applying granules at less than recommended rate may result in less than ideal particle distribution in the soil, resulting in decreased nodulation performance.
- Product performance may be reduced in soil with high nitrogen levels or when applied with high levels of nitrogen fertilizer.

Precautions

The active ingredient in LALFIX® DUO FS for Soybeans is naturally occurring *Bradyrhizobium japonicum* cells. Persons allergic to bacteria and immune deficient individuals should avoid using this product. Avoid exposure through inhalation, or to open wounds and eyes. Standard protective clothing and equipment including gloves, safety goggles and a NIOSH (The National Institute for Occupational Safety and Health) or MSHA (the Mine Safety and Health Administration) approved respirator are recommended during handling and storage. Use this product in well ventilated areas. 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. In case of inhalation, remove person to fresh air. In case of ingestion, do not induce vomiting but rinse mouth with water. Seek medical attention if discomfort or irritation develops. Medical treatment should be based on the judgement of the physician in response to reaction of the patient.

Storage & Handling Recommendations

The active ingredient in LALFIX® DUO FS for Soybeans is a living microorganism and requires specific storage conditions to ensure viability and product performance.

- Store bags and totes in a cool (40-70°F/ 5-20°C) dry location and out of direct sunlight.
- Do not store near direct heat sources (radiant heaters). This can lead to uneven moisture distribution.
- Do not freeze/thaw.
- Store bags and totes off of the floor (use a pallet or shelving) and avoid prolonged direct contact with cold damp surfaces. Bags should be stored flat.
- Use product before expiration date.
- Open package only when ready to use. Once open, use the entire package.
- Do not store opened bags of LALFIX® DUO FS for Soybeans.
- Unused product should be disposed of in accordance with applicable federal, provincial or state, and municipal laws and regulatory guidelines.

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.

LALFIX® DUO FS for Soybeans uses patented technology and is a registered trademark of Danstar Ferment AG / LALLEMAND PLANT CARE.

Not a plant food product.

Not recommended for use as a fertilizer substitute.

Net Contents: 27 lbs per bag or 864 lbs per tote
(12.2 kg per bag or 391.9 kg per tote)

Guaranteed by:

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

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