

Cell-Tech[®] granular nitrogen-fixing inoculant for

soybean

ATTENTION:

This Specimen label is provided for general information only.

CONTAINS NONPLANT FOOD INGREDIENT(S)

ACTIVE: 100 million (1 x 10⁸) viable cfu/g *Bradyrhizobium japonicum*

INERT: Peat-based carrier >99%

How it Works

The active ingredient in Cell-Tech[®] Granular Nitrogen-Fixing Inoculant for Soybean is the bacterium *Bradyrhizobium japonicum*. *Bradyrhizobium japonicum* forms root nodules which convert, or fix, nitrogen in the air into forms the plant can use.

Directions for Use

Shipping and stacking of Cell-Tech Granular Soybean may cause some granules to become compacted. Loosen compacted granules before using this product.

Cell-Tech Granular Soybean should be applied directly with the seed in the seed row using a granular tank for application. Application rates will vary according to row spacing; refer to Table 1 for details. Apply in-furrow only. Do not band. Do not mix Cell-Tech Granular Soybean in the same tank with fertilizers, granular pesticides, or seed. Cell-Tech Granular Soybean can be used with pesticide treated seed. Do not leave Cell-Tech Granular Soybean in tank or seed cart overnight. Be sure to calibrate your equipment to deliver the correct amount of Cell-Tech Granular Soybean per acre for your row spacing, refer to Table 1 for details. Under humid conditions, reduce the weight of Cell-Tech Granular Soybean per tank and check flow on a regular basis.

Calibrate with 3-4 bags before adding more inoculants to the tank or seed cart. A maximum of 50 kg per tank should be used.

- Before using, make sure the hopper, rotor, feed mechanism, and calibration equipment are free from chemical residue, fertilizer, and debris.
- Make sure that the tubing to the planting shoe is as straight and vertical as possible.
- If using an air seeder, ensure that the tank screen is clean when filling tank or seed cart. Follow calibration instructions supplied by the air cart manufacturer. Check flow regularly.
- If augering, please do so at low speeds to avoid damage to Cell-Tech Granular Soybean.

For Best Results:

- Double inoculation, the act of using a double application of a rhizobial inoculant, is recommended in certain soil conditions (such as when planting on land previously used for pasture or planting soybean for the first time).
- Double inoculation can be achieved by application of any combination of liquids, peat powders, or furrow-applied liquid or granule rhizobial inoculants that are labeled for the target crop.

Table 1: Application rates for Cell-Tech Granular Soybean

Row Spacing (cm)	15.2	17.7	20.3	22.9	25.4	30.5	38.1	61	76.2
Row Spacing (in)	6	7	8	9	10	12	15	24	30
Application rates (kg/ha) low range	8.8	7.5	6.6	5.8	5.2	4.4	3.5	2.2	1.7
Application rates (kg/ha) high range	37.3	32.0	27.9	24.7	22.3	18.6	14.9	9.3	7.4
Application rates (lb/ac) low range	7.7	6.6	5.8	5.1	4.6	3.8	3.1	1.9	1.5
Application rates (lb/ac) high range	32.7	28.0	24.5	21.8	19.6	16.3	13.1	8.2	6.5

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Special considerations

Environmental conditions can change the flowability of Cell-Tech Granular Soybean.

- Do not allow Cell-Tech Granular Soybean to get wet or to dry out.
- In humid conditions, check and clean metering system regularly to ensure consistent flow.

Where to use for maximum benefit

Higher nitrogen fixation with Cell-Tech Granular Soybean occurs in soils that are low in available forms of nitrogen and populations of *Bradyrhizobium japonicum*.

Benefits of using Cell-Tech Granular Soybean may be limited on

Soils with high nitrogen levels or with high application rates of nitrogen fertilizer.

Applicators and Other Handlers

The active ingredient in Cell-Tech Granular Soybean is *Bradyrhizobium japonicum* viable cells. Eye or skin contact, inhalation, or ingestion should be avoided. Wear standard protective clothing and equipment including gloves, and safety glasses. Ensure adequate ventilation. Where exposure through inhalation may occur, use respiratory protective equipment. This product contains microorganisms that may have the potential to provoke sensitizing reactions; use appropriate personal protective equipment (PPE) to reduce exposure. Sensitized individuals should wear an NIOSH-approved respirator. In case of contact with skin or eyes, immediately flush exposed areas with plenty of water. Get medical attention if irritation occurs.

Storage and Disposal

The active ingredient in Cell-Tech Granular Soybean is a living organism and requires specific storage conditions to ensure viability and product performance. To maintain product viability:

- Store under cool and dry conditions, avoid temperatures consistently over 20°C (68°F) and long term freezing conditions.
- Avoid exposure to direct sunlight and heat sources.
- Minimize temperature fluctuations.
- Avoid freeze/thaw cycles.

- Keep container closed when not in use.
- Use before the expiration date. The expiration date is valid only for unopened bags stored under the conditions listed above.
- Use this product only in well-ventilated areas.
- **IMPORTANT – STORE FLAT UNTIL READY TO USE – USE BEFORE DATE PRINTED ON TAPE.**

Unused Cell-Tech Granular Soybean should be disposed of in accordance with applicable federal, state/provincial, and local requirements.

Information regarding the contents and levels of metals in this product is available on the internet at: <http://www.aapfco.org/metals.html>

Limited Warranty

The Seller warrants that this product contains a minimum number of *Bradyrhizobium japonicum* viable cells as specified on this label. The Seller makes no other warranty expressed or implied as to product viability or performance since product storage, use and growing conditions are beyond the Seller's control. Seller's guarantee is limited to the terms set out on the label and subject thereto. Buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition. If this product does not perform as warranted above, and to the extent consistent with applicable law, customer's sole remedy for breach of warranty shall be replacement of the product or refund of the purchase price paid, at the option of Novozymes BioAg.

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