# Cell-Tech West granular

# nitrogen-fixing inoculant for

soybean

#### ATTENTION:

This Specimen label is provided for general information only.

### **MINIMUM GUARANTEE ANALYSIS**

ACTIVE: 1 x 10<sup>8</sup> viable cfu/g *Bradyrhizobium japonicum* 

INERT: peat-based carrier >99%

#### NON-PLANT FOOD INGREDIENT

Not a fertilizer substitute

#### **How it Works**

The active ingredient in Cell-Tech® West granular nitrogen-fixing inoculant for soybean is the bacterium *Bradyrhizobium japonicum*. *Bradyrhizobium japonicum* forms root nodules which convert or fix nitrogen from the air into forms the plant can use.

#### How to Apply

Shipping and stacking Cell-Tech West granular may cause some granules to become compacted. Loosen compacted granules before using this product.

Cell-Tech West granular 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 West granular in the same tank with fertilizers, granular pesticides, or seed. Cell-Tech West granular can be used with pesticide treated seed. Do not leave Cell-Tech West granular in a tank or seed cart overnight. Be sure to calibrate your equipment to deliver the correct amount of Cell-Tech West granular per acre for your row spacing, refer to Table 1 for details. Under humid conditions, reduce the weight of Cell-Tech West granular per tank and check flow on a regular basis.

Calibrate with 50 kg before adding more inoculant 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 West granular.

Table 1. Application rates for Cell-Tech West granular nitrogenfixing inoculant for soybean

Row Spacing (cm)	15.2	17.7	20.3	22.9	25.4	30.5	38.1	61.0	76.2
Row Spacing (in)	6.0	7.0	8.0	9.0	10.0	12.0	15.0	24.0	30.0
Application rates (kg/ha)	8.0	6.9	6.0	5.3	4.8	4.0	3.2	2.0	1.6
Application rates (lb/ac)	7.1	6.2	5.4	4.7	4.3	3.6	2.9	1.8	1.4

#### **Special Considerations**

Environmental conditions can change the flowability of Cell-Tech West granular.

- Do not allow Cell-Tech West granular to get wet or 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 West granular occurs in soils that are low in available forms of nitrogen and populations of *Bradyrhizobium japonicum*.

#### Benefits of using Cell-Tech peat may be limited on:

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

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### **Applicators and Other Handlers**

The active ingredient in Cell-Tech West granular nitrogen-fixing inoculant for 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 a 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**

Cell-Tech West granular nitrogen-fixing inoculant is a living organism and requires specific storage conditions to ensure viability and product performance. To maintain product viability:

- Store bags under cool conditions <20°C (68°F) away from sunlight and direct 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.

Unused Cell-Tech West granular 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 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 on that condition.

