# Dyna-Start® 3P Rhizobia

# **Dual Strain Soybean Inoculant**

Not a plant food product.

Not recommended for use as a fertilizer substitute.

#### **How It Works:**

The active ingredient 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.

#### **Guaranteed minimum analysis:**

Active Ingredients: 1x10^10 CFU/ml Dual *Bradyrhizobium japonicum* per gram.....<1% Inert: Aqueous carrier.....>99%

# FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL 1-866-944-8565.

Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment.

### Personal protective equipment (PPE) and safety recommendations

The active ingredient in Dyna-Start® 3P Rhizobia is Bradyrhizobium japonicum viable cells. If use of this product by individuals allergic to molds and/or fungi is unavoidable, absorption by eye or skin contact, inhalation, or ingestion must be prevented to minimize the chance of an allergic reaction. Wear standard protective clothing and equipment including gloves, safety glasses and 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.

Net Contents: 8.87 L (300 fl oz)
Package Treats: [400 seed units]

Net Contents: 1.77 liters (60 fl oz) Package Treats: 80 seed units

#### **Precautions:**

The active ingredient is naturally occurring *Bradyrhizobium japonicum* cells. Persons allergic to bacteria should avoid using this product. If use by allergic person is unavoidable, prevent the possibility of absorption by eye or skin contact, inhalation, or ingestion to minimize the possibility of 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.

On Seed Application Rate: 1.5 fluid ounces per 100 lbs. (44.36 ml per 45.4 kg) of seed.

# **On Seed Application Method:**

- Ensure seed treater has been properly calibrated.
- Shake well to achieve uniform suspension of the product. Bacterial settling is normal.
- Apply 1.5 fluid ounces (100.6 ml) per 100 lbs. (45.4kg) of seed.
- Protect inoculated seed from direct sunlight or hot drying winds.
- Recommend to plant within 90 to 120 days on bare seed for best results.
- Over-application 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.
- Some seed treatments may be harmful to the inoculants.
- A compatibility test should be conducted prior to use with other seed treatments.

#### On-seed stability and seed treatment recommendations:

- If used with seed treatments, apply recommended rate to Dyna-Start 3P Rhizobia mixture and agitate.
- We do not recommend the use of additional water, polymers, or dyes beyond what is required with the seed treatment.
- If using additional water with Dyna-Start 3P Rhizobia, use chlorine-free water.
- If using additional water with fungicide and insecticides, use chlorine-free water.
- For a list of compatible seed treatments, contact Loveland Products, Inc. at 1-888-574-2878 or visit: www.lovelandproducts.com.

#### **Storage and Handling Recommendations:**

- Do not store product in areas where freezing will occur or where temperature will exceed 72°F/22°C.
- Store in a cool, dry place out of direct sunlight and wind.
- Use before expiration date stated on the package.
- Open package only when ready to use.
- Shake well before use.
- Apply measured amount to soybean seed.
- Plant inoculated seed immediately for best results.
- Do not mix with caustic fertilizers or pesticides.
- 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 judgement of the physician in response to the reactions of the patient.

#### **To Maintain Product Viability:**

- Store under cool conditions (<72°F/22°C) away from direct sunlight and heat.</li>
- Use entire contents of bag after opening.
- Do not store opened bags.
- Use before the expiration date for this two-season product.
- The expiration date is valid only for unopened bags stored under cool conditions (<72°F/22°C).</li>
   Unused product should be disposed of in accordance with applicable federal, provincial or state, and municipal laws and regulatory guidelines.

#### **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 scoop up the material for disposal.

# **STORAGE/PRECAUTIONS**

Inoculants are live organisms. Store in cool, dry place, and out of direct sunlight. Do not allow product to freeze. For more uniform temperature control, store at floor level. Use before expiration date and only on soybeans. Shake well before use.

Open package only when ready for use. Once opened, use within 24 hours. Do not mix with unapproved products. For a list of compatible products, contact Loveland Products, at 1-888-574-2878 or visit: www.lovelandproducts.com

For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC: 1-800-424-9300.

# CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

**BEFORE BUYING OR USING THIS PRODUCT,** read the Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary. LOVELAND PRODUCTS, INC. warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the

Directions for Use, when the product is used in accordance with such Directions for Use under normal conditions of use. LOVELAND PRODUCTS, INC. MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE BUYER'S OR USER'S EXCLUSIVE REMEDY FOR ANY INJURY, LOSS, OR DAMAGE RESULTING FROM THE HANDLING OR USE OF THIS PRODUCT SHALL BE LIMITED TO ONE OF THE FOLLOWING, AT THE ELECTION OF LOVELAND PRODUCTS, INC. OR THE SELLER: DIRECT DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE PRODUCT OR REPLACEMENT OF THE PRODUCT. LOVELAND PRODUCTS, INC. AND THE SELLER SHALL NOT BE LIABLE TO THE BUYER OR USER OF THIS PRODUCT FOR ANY CONSEQUENTIAL, SPECIAL, OR INDIRECT DAMAGES, OR DAMAGES IN THE NATURE OF A PENALTY.

Dyna-Start is a registered trademark of Loveland Products, Inc.

Manufactured for:



P. O. Box 1286 • Greeley, CO 80632-1286