

# Optimize<sup>®</sup> XC Inoculant



## soybean

### ATTENTION:

This specimen label is provided for general information only.

- This biological product may not yet be available or approved for sale or use in your area.
- It is your responsibility to follow all Federal, state and local laws and regulations regarding the use of biologicals.
- Before using any biological, be sure the intended use is approved in your state or locality.
- Your state or locality may require additional precautions and instructions for use of this product that are not included here.
- Monsanto does not guarantee the completeness or accuracy of this specimen label. The information found in this label may differ from the information found on the product label.
- You should not base any use of a similar product on the precautions, instructions for use or other information you find here.
- Always follow the precautions and instructions for use on the label of the biological you are using.

### MINIMUM GUARANTEED ANALYSIS

ACTIVE: 10 billion ( $1 \times 10^{10}$ ) viable cfu/g *Bradyrhizobium japonicum*  
 $1 \times 10^{-7}$ % lipo-chitooligosaccharides

INERT: Aqueous carrier >99%

### NONPLANT FOOD INGREDIENT

Not a fertilizer substitute

### SHAKE WELL BEFORE USING.

Read the entire label before using this product. Use only according to label directions.

### How it Works

Optimize<sup>®</sup> products combine LCO technology with quality inoculants. The active ingredients in Optimize XC Inoculant are the bacterium *Bradyrhizobium japonicum* and lipo-chitooligosaccharide (LCO). *Bradyrhizobium japonicum* forms root nodules which convert, or fix, nitrogen in the air into forms the plant can use. The LCO molecule enhances the soil microbial environment to support the plant's nutritional availability, supporting the growth and yield potential of the crop.

One 68 fl oz Liquid Additive and one 232 fl oz Liquid Bladder will treat 400 units (20,000 lb) of soybean seed.

For retail application only.

### Application Rate

- Apply at a rate of 1.5 fl oz/100 lb seed (44.4 ml/ 45.4 kg).

### For Best Results

- Open package only when ready to use.
- Plant within 120 days of adding to bare soybean seed.

### Directions for Use for Continuous Application

- Start preparation of the Optimize XC Inoculant only when you are ready to apply to seed.
- To ensure an even suspension shake the Liquid Additive and Liquid Bladder well. Settling of bacteria during storage is normal.
- Add the Liquid Additive into the Liquid Bladder, which contains the inoculants. Close the Liquid Bladder cap and agitate the premix.
- Pour the contents of the Liquid Bladder into the treater.
- Do not leave Optimize XC Inoculant premix standing in treater mix tank for more than 24 hours if applied without a seed treatment.
- Apply to the seed as soon as possible.
- Calibrate the system to ensure that 1.5 fl oz (44.4 ml) of Optimize XC Inoculant flows out of the nozzle in the time that 100 lb (45.4 kg) of seed passes beneath it.



Manufactured For  
and Guaranteed By:  
Monsanto Company  
800 N. Lindbergh Blvd.  
St. Louis, Missouri 63167 USA

For Medical, Transportation,  
Spill or Other Emergencies  
Call Collect 24 Hours a Day  
1-314-694-4000

For Product Use Information  
Call: 1-877-775-8787

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## Seed Treatment Recommendations

- If used with seed treatments, apply recommended rate to Optimize XC Inoculant.
- We do not recommend the use of additional water, polymers, or dyes beyond what is required with the seed treatment.
- Application with other seed treatments is possible, but may reduce the planting window. For up-to-date pesticide compatibility information, please call Monsanto Company at 1-877-775-8787.

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. For additional information, please see <http://www.monsantobioag.com/global/us/Pages/Double-Inoculation-for-Soybeans.aspx>.

## Applicators and Other Handlers

The active ingredients in Optimize XC Inoculant are *Bradyrhizobium japonicum* and lipo-chitooligosaccharide. Use appropriate personal protective equipment (PPE) to reduce exposure. 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. 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

- Store bags under cool and dry conditions, avoid temperatures consistently over 35°C/95°F, away from sunlight and direct heat sources.
- Do not allow to freeze.
- Minimize temperature fluctuations.
- Use before the expiration date.

Unused Optimize XC Inoculant and Optimize XC Inoculant inoculated seed should be disposed of in accordance with applicable federal, state 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>.

To ensure proper labeling for your state, please go to: [www.monsantobioag.com](http://www.monsantobioag.com)

## Limited Warranty

The Seller warrants that this product contains a minimum number of *Bradyrhizobium japonicum* viable cells and minimum concentration of lipo-chitooligosaccharides 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 Monsanto Company.

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Patents that cover Optimize can be found at [www.monsantotechnology.com](http://www.monsantotechnology.com)

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