

# Marauder<sup>®</sup>

## Soybean Inoculant System



ADVANCED BIOLOGICAL MARKETING | P.O. Box 222 | Van Wert, OH 45891 | USA | 877.617.2461 | [ABM1st.com](http://ABM1st.com)

Expiration:

Batch:

USE ENCLOSED APPLICATION DIRECTIONS  
AND TECHNICAL INFORMATION SHEET  
FOR SPECIFIC INSTRUCTIONS.

**Net Weight: 3.495 lbs. (1,585.3 grams)**

**Net Contents: 72.5 fl. oz. (2,144 ml.)**

**This package treats 100 x 140k units of soybean seed**

# Marauder<sup>®</sup>

## Soybean Inoculant System

### Storage instructions:

Protect product from excessive heat. Store in a cool place between 40°F and 77°F out of direct sunlight. Do not allow to freeze. Open packages only when ready to use. Use entire contents after opening.

### Caution:

Marauder may be used on either untreated seed or seed that has been treated with a fungicide or insecticide. For seed treated with a fungicide or insecticide, wear appropriate PPE to avoid direct skin contact, and follow the caution statements of the other treatments. In case of direct contact with skin or eyes, immediately flush the exposed area with water. Seek medical attention if irritation develops or persists.

### Application Directions:

Marauder is an all liquid system designed for use in a liquid tank mix in commercial seed treatment systems. For good seed coverage, ABM generally recommends that the total liquid slurry be a minimum of 2.5 fl. oz. per 140k unit of soybean seed - (Marauder, non-chlorinated water and approved liquid seed treatments). Experienced seed treaters may choose to decrease the total volume applied.

1. Prior to adding Marauder to the tank, shake well all three Marauder components (liquid rhizobia, extender, liquid bacillus).
2. All three Marauder components (liquid rhizobia, extender, liquid bacillus) are to be used together.
3. Gradually pour Marauder components into **non-chlorinated water** or approved liquid seed treatments.
4. When all three components are combined (liquid rhizobia, extender, liquid bacillus) the mixture is ready to apply.

**See more detailed directions and Technical Information on enclosed sheet.**

### CONTAINS NON-PLANT FOOD INGREDIENTS

#### Guaranteed Analysis:

**Active Ingredient:** 2.0% *Bradyrhizobium japonicum*  $1 \times 10^{10}$  cfu/ml and 0.2% *Bacillus licheniformis*  $2 \times 10^{10}$  cfu/ml

**Inert Ingredients:** 92.0% Water and 5.8% Metabolic Stabilizer



## Application Directions and Technical Information

<b>One Marauder bundle contains:</b>	1 x 55 oz. Rhizobia bladder per case 1 x 12.5 oz. Extender bottle per case 1 x 5 oz. Bacillus bottle per case	<b>One Marauder bundle Treats:</b>	100 x 140k units of soybean seed
<b>Marauder Application Rate:</b>	.725 oz. (by volume) per 140k units of soybean seed		(Achieves seed load rate of over 1 million Rhizobia cells/seed)
<b>Liquid Rhizobia Package (Bladder) Size</b>	One rhizobia bladder contains 55 oz (by volume)	<b>Liquid Rhizobia Formulation and Specification:</b>	<b>Guaranteed Analysis:</b> Active ingredient: Bradyrhizobium japonicum (minimum 1x10 <sup>10</sup> cfu/ml)
<b>Liquid Rhizobia Application Rate</b>	.55 oz. per 140k soybean seed Extender and Bacillus should always be mixed and applied with liquid rhizobia		
<b>Extender Package Size</b>	One bottle contains 12.5 oz. (by volume)	<b>Extender Formulation:</b>	Starch-based liquid polymer
<b>Extender Application Rate:</b>	.125 oz. per 140k units of soybean seed Extender and Bacillus should always be mixed and applied with liquid rhizobia	<b>One bottle Extender Treats:</b>	100 x 140k units of soybean seed
<b>Bacillus Package Size</b>	One bottle contains 5 oz. (by volume)	<b>Bacillus Formulation:</b>	<b>Guaranteed Analysis:</b> Active ingredient: Bacillus licheniformis (minimum 2x10 <sup>10</sup> cfu/ml)
<b>Bacillus Application Rate:</b>	.05 oz. per 140k units of soybean seed Extender and Bacillus should always be mixed and applied with liquid rhizobia	<b>One bottle Bacillus Treats:</b>	100 x 140k units of soybean seed
<b>Application Directions:</b>	<p>Marauder is an all liquid system designed for use in a liquid tank mix in commercial seed treatment systems. For good seed coverage, ABM generally recommends a minimum of 2.5 oz. liquid slurry per 140k units of soybean seed, in any combination of <b>non-chlorinated water</b> and approved liquid seed treatments (See chart on reverse.) Experienced seed treaters may choose to decrease the total volume applied.</p> <ol style="list-style-type: none"> <li>1. Prior to adding Marauder to the tank, shake well all three Marauder components (liquid rhizobia, extender, liquid bacillus).</li> <li>2. All three Marauder components (liquid rhizobia, extender, liquid bacillus) are to be used together.</li> <li>3. Gradually pour Marauder components into <b>non-chlorinated water</b> or approved liquid seed treatments.</li> <li>4. When all three components are combined (liquid rhizobia, extender, liquid bacillus) the mixture is ready to apply.</li> </ol>		
<b>Tank Mix Time Restrictions:</b>	<p>To maintain inoculants viability, there is a maximum time Marauder can be kept in the mix tank:</p> <ol style="list-style-type: none"> <li>1. Marauder alone or with <b>non-chlorinated water</b> should be applied to seed within 24 hours.</li> <li>2. With approved seed treatments, Marauder should be applied to seed within 4 hours.</li> </ol>		
<b>New Soybean Ground or Adverse Crop Conditions</b>	<p><b>Recommendations for Adverse Conditions or New "Virgin" Soybean Fields</b> – If soil has not hosted the specific legume for more than three (3) years; Soil pH is less than 5.8 (The pH should be adjusted by liming prior to inoculation); Soil pH is more than 8.5; Soil organic matter is less than 1.5%; Drought or flooding has occurred; Topsoil conditions exceed 80° F; Soil erosion, or with the use of soil treatments and chemicals injurious to soil bacteria and inoculants, to <b>Maximize Soybean Yield Potential:</b> When planting soybeans under the conditions listed above, ABM recommends a double (2X) rate of inoculants. <b>Follow these recommendations.</b></p> <p>If using Marauder, achieve a 2X inoculants rate as follows:</p> <ol style="list-style-type: none"> <li>a. Apply a 1X rate of Marauder no more than 30 days prior to planting.</li> <li>b. Additionally, apply at planting, a 1X rate of an America's Best Inoculant formulation: ABI Sterile Peat</li> </ol> <p><b>Please contact your ABM representative at 877-617-2461 for a specific recommendation.</b></p>		
<b>Storage Instructions:</b>	Protect product from excessive heat. Store in a cool place between 39 and 77 ° F out of direct sunlight. Do not allow to freeze. Open packages only when ready to use. Use entire contents after opening.		