



*Microbial Inoculant*  
**A Novel Biological Inoculant for Commercial Seed Treating That  
Helps Protect Crops Against Drought, Temperature and Salt Stresses**



### **Agricultural Benefits**

Better tolerance against drought, temperature and salt stresses

### **Applicability**

Easy to use liquid formulation  
Treats seeds with beneficial microorganisms  
Compatible with common seed treatment chemicals and microbes

### **Guaranteed Minimum Analysis**

*Trichoderma harzianum* ..... 1x10<sup>6</sup> viable spores/ml

**Net Volume:** 118 ml (4 fl oz)

**Lot #:** \_\_\_\_\_

**Expiration Date:** \_\_\_\_\_

Registration Number: 2020137A Fertilizers Act

### **Manufactured and Guaranteed by:**

Adaptive Symbiotic Technologies  
3503 NE 45<sup>th</sup> Street, Suite 2w  
Seattle, WA 98105, USA

### **General Information**

**BioEnsure**<sup>®</sup> is a seed treatment containing fungal endophytes that enhance drought, temperature and salt stress tolerance of crop plants. Once coated onto the surface of seeds, our formulation keeps the fungus inactive until the seed is planted and exposed to conditions that stimulate seed germination. Upon germination, the fungus activates and establishes a beneficial symbiosis with seedlings. The symbiotic plants become more tolerant to drought, temperature and salt stresses. **BioEnsure**<sup>®</sup> is formulated to be compatible with existing seed treatment equipment and chemicals and can be simply added as an additional component during the seed treatment process.

### **Application and Mixing Instructions**

**Seed Treatment:** To achieve optimal seed coverage, dilute **BioEnsure**<sup>®</sup> with water and apply directly to dry seed alone or in combination with other inoculants and/or other registered seed treatments (e.g., colorants, polymers, insecticides, nematicides and fungicides). Do not tank-mix **BioEnsure**<sup>®</sup> with fungicides or treatments containing biocides. Do not mix **BioEnsure**<sup>®</sup> with any product containing a label prohibiting against such mixing. When tank-mixing with any other registered seed treatments, always read and follow all use directions, restrictions, and precautions of both **BioEnsure**<sup>®</sup> and other products. After diluting, product should be applied within 8 hours. The resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

*In Furrow:* To achieve optimal seed coverage, dilute **BioEnsure**<sup>®</sup> with water or fertilizer and apply directly onto seeds during planting. After mixing, material should be applied within 8 hours. Do not tank-mix **BioEnsure**<sup>®</sup> with fungicides or products containing biocides. Do not mix **BioEnsure**<sup>®</sup> with any product containing a label prohibiting against such mixing. When tank-mixing with any fertilizer, always read and follow all use directions, restrictions, and precautions of both **BioEnsure**<sup>®</sup> and other products. The resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

*Foliar Spray:* To achieve optimal coverage, dilute **BioEnsure**<sup>®</sup> with water and directly apply onto plant tissue during vegetative growth stages. **BioEnsure**<sup>®</sup> can be mixed with fertilizer, minerals, or other microorganisms and should be applied within 8 hours of mixing. Do not tank-mix **BioEnsure**<sup>®</sup> with fungicides or products containing biocides. Do not mix **BioEnsure**<sup>®</sup> with any product containing a label prohibiting against such mixing. When tank-mixing with any fertilizer, always read and follow all use directions, restrictions, and precautions of both **BioEnsure**<sup>®</sup> and other products. The resulting tank mix must be in accordance with the more restrictive label limitations and precautions. Do not exceed label dosage rates.

### Use & Rate Recommendations

Applied either in furrow, as a foliar spray, or as a seed treatment according to the table below:

Crop	In Furrow (ml/hectare)	Foliar Spray (ml/hectare)	Seed Treatment (ml/45kg)
Alfalfa	7.4	7.4	7.4
Barley	7.4	7.4	1.5
Canola	7.4	7.4	17.7
Corn	7.4	7.4	5.9
Dry Peas	3.7	3.7	3.0
Chickpea	3.7	3.7	0.9
Lentil	7.4	7.4	3.0
Soybean	7.4	7.4	3.0
Wheat (spring & winter)	7.4	7.4	3.0

**Application Notes.** Do not use with soil fumigants. Use **BioEnsure**<sup>®</sup> solution within 8 hours of mixing.

### Safety Information

This product contains microorganisms that may have the potential to provoke sensitizing reactions; use appropriate personal protective equipment (PPE) to reduce exposure.

### Safety Instructions

KEEP OUT OF REACH OF CHILDREN.

May be harmful if swallowed. Avoid contact with eyes, skin, or clothing. Avoid breathing spray mist. May cause irritation of nose, throat, skin or eyes. Use of waterproof gloves and protective eyewear is recommended when handling this product. Wash thoroughly after handling. Remove and wash contaminated clothing before reuse.

#### First Aid

If Inhaled: Remove immediately to fresh air. If breathing is difficult, seek immediate medical attention.

If swallowed: Drink large quantities of water and seek medical advice.

If on Skin: Remove contaminated clothing and wash skin with soap and water. If irritation develops seek medical attention.

If in Eyes: Flush with copious amounts of clean water for at least 15 minutes holding eyelids apart to ensure flushing of entire eye surface and seek medical advice.

### Storage and Disposal

#### Product storage

Store in unopened containers at refrigeration temperatures until applied to seeds. Keep from direct sunlight, from freezing and from exposure to elevated temperatures (above 75°F/25°C). For long term storage, best stored at refrigeration temperature.

*Product disposal*

All unused material should be treated with 1/4 volume of bleach for 30 minutes before disposal.

*Container disposal*

Do not reuse empty container. Triple rinse and discard container. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by state and local ordinance. If burned, stay out of smoke. Wash hands with soap and water after rinsing containers.

**Warranty Statement**

The seller warrants that this product contains a minimum number of viable beneficial microorganisms as indicated on this label. The seller makes no other warranty expressed or implied as to product viability or performance since 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.