

ESPECIALISTAS EN MICROORGANISMOS

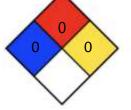
Section 1- Identification of manufacturer	the hazardous chemical or mixture and the supplier or
Produced by:	Microendo Inc
Name:	TricoProtect
Density:	0.9817g/ml
Evaporation Range:	92°C-94.5°C
Solubility:	Water soluble
Appearance:	Viscous liquid
Boiling Point:	N/A
Freezing Point:	N/A
Recommendations:	The product tends to decompose if not stored properly
Instability:	The product is not stable at temperatures above 45°C
Telephone:	+52 1 3311330388

#### Section 2- Hazard Identification

#### Classification according to NCh. 382 of. 2015

Not Classified as hazardous Identification NCh. 2190 of. 2003 Not applicable

#### Identification NCh. 1411/4 of.78



Safety level: Health level: Flammability level: Reactivity level: Special level:

- 0- None 0- None
- 0 None
- 0- None

### **Risks to people's health**

May cause irritation to the skin and respiratory tract. **Risks to the environment** Unidentified **Hazards of a physical or chemical nature** 

Contact with combustible material will not cause spontaneous ignition, but could aggravate an existing fire

Classification according to the Globally Harmonized System 6 Ed. 2015 Hazard class and category Hazard Indication

Not applicable	Not applicable
Label elements according to	the Globally Harmonized System 6 Ed. 2015
Pictogram	Not aplicable
Word of warning	Not aplicable
Hazard Indication	Not aplicable
Precautionary tips	Not aplicable

### **Applications:**

**TricoProtect** is a biofertilizer/biofungicide whose action is based on the activity of the fungus *Trichoderma harzianum* that has good qualities for the control of diseases in plants caused by fungal pathogens of the soil, mainly of the genera *Phytophthora, Rhizoctonia, Sclerotium, Pythium and Fusarium* among others.

**TricoProtect** acts as a hyperparasite that competes against other fungi capable of producing root diseases (pathogenic fungi), reducing the negative effect that these harmful fungi have on plant health. In this way, they increase the resistance of crops to diseases.

**TricoProtect** is an innovative product that contains a combination of spores and mycelium as well as B-1,3-glucanase enzymes, chitinases and extracellular proteases secreted in the culture medium, which increases biocontrol activity compared to other products made only from fungal spores.

**Trico Protect** has the ability to colonize the plant through the root, which helps its prolongation and growth by creating a symbiotic relation with the plant.

**TricoProtect** comes from a fresh and metabolically active crop, which is why it is recommended for use at the time of receipt. Very early or during the afternoon, avoiding long hours of sun and solar radiation.

The product is applied injected to the root or via foliar directly to the leaves of the plant. Always make sure that the implement to be used has not had a previous bactericide or fungicide. Wash the pump thoroughly before use. Preferably use neutral powdered soap.

It is recommended to use a non-ionic adherent, preferably organic, in order to improve the adhesion of the product to the surface of the leaves.

It is recommended to use humic acids as a photoprotectant, to promote the work of the bio-insecticide on the leaves of the crops.

It is recommended to dilute, per hectare, 1 liter of **TricoProtect** in natural water as clean as possible for crops of 1-9 kg and for crops of 10-50 kg use 2 liters per hectare and of 60-100 kg use 3 liters per hectare. Do not dilute more than 300 L per liter of **TricoProtect** because microbial cultures require a minimum concentration to act.

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Components	% (P/V)
Viable cells from: Trichoderma harzianum	99.9%
Depleted growing medium	0.1%

Product Risk Classification: Usually NO hazard.

**Risks to people's health:** Mild. It does not cause harmful effects if is handled and used under normal conditions suggested on the label.

Effects of acute (one-time) overexposure: If the product comes into contact with the eyes or skin, irritation may occur. Routes of exposure are oral, inhalation, and eyes. Avoid inhaling spray vapors.

**Skin contact:** It can irritate the skin in some people.

Eye contact: It can irritate the eyes in some people.

Ingestion: May cause severe stomach upset if ingested in large amounts.

Environmental hazards: Non-toxic to beneficial fungi.

### Special Product Hazards: None.

**Specific Risks:** This product is not defined as a hazardous compound. The ingredients in this product are considered non-hazardous

### Section 4- First Aid Measures:

**General:** In case of discomfort or suspected discomfort, stop working and seek medical assistance promptly. Remove those affected from the danger zone. Preferably outdoors. Help the affected person and keep them at rest

**Inhalation:** Remove the affected person from the danger zone. Preferably outdoors. Help the affected person and keep them at rest. Call a doctor.

**Skin contact:** Quickly remove contaminated clothing. Wash the affected area with plenty of soap and water. Call a doctor if your skin is irritated. Eye contact: Wash with large amounts of water for 15 minutes, with eyelids open. Consult your ophthalmologist.

**Ingestion:** Consult a doctor. Bring the product label or safety data sheet. Consult the poison control center. Do not induce vomiting. If it occurs spontaneously, keep your respiratory tract clear. Do not give anything by mouth to the unconscious or convulsive person. Apply base treatment.

**Antidote:** There is no specific antidote. Symptomatic treatment should be applied. **Ingestion**: Consult a doctor. Apply base treatment.

Human Experiences: No Known Cases of Poisoning

### **Section 5 - Fire Measures**

### Flammable: No

**How to handle a fire:** Wear individual breathing equipment. Use water pressure. If the area is heavily exposed to fire and conditions permit, allow the fire to extinguish itself, because water can increase the contaminated area. Evacuate all staff from the area.

**Personal Protective Equipment for Firefighting:** Wear protective equipment with self-contained breathing equipment or wear an approved respirator mask. Avoid breathing combustion fumes.

### Section 6 - Measures in case of spills.

**Measures to be taken in case of product spills:** Ventilate the environment. Do not direct water into drains. Do not contaminate streams or stored water. Delimit the area to contain the spill, making a wall with adsorbent material such as sawdust, sand or clay.

**Personal protective equipment to handle the emergency:** Wear full protective equipment, long-sleeved shirt, long pants, waterproof gloves, and shoes or boots with socks.

**Precautions to take to avoid damage to the environment:** Read fire and spill regulations before acting.

**Cleaning methods:** Wash the floor with a strong industrial detergent and rinse with water.

**Waste disposal methods:** Cover spilled product with sawdust, sand or clay or other absorbent material. Shoveling or sweeping. Place it in metal or plastic containers suitable for disposal, in an authorized place for this purpose.

## Section 7- Product Handling and Storage

**Product Handling Information:** Always read the instructions on the label before using the product. The recommendations suggested in the safety data sheet should be followed.

**Precautions:** Avoid contact with eyes, skin, and clothing. Avoid inhaling vapors. No eating, no drinking, no smoking on the app.

Safe Driving Recommendation: Wear gloves and protective clothing equipment. Do not inhale, wear an approved mask for organic powders, as appropriate.

**Storage Conditions:** Store at room temperature. At a maximum temperature of 45 °C and a minimum of 5 °C. Store away from heat, flames or sparks and direct sunlight.

**Recommended packaging:** Store only in original containers sealed and labeled by the formulator.

## **Section 8- Exposure Control and Personal Protection**

**Personal Protective Equipment**: Before using the product, read the authorized label and this safety data sheet if available.

Section 9- Physical and Chemical Properties

Information on basic physical and chemical properties:				
Aspect	Liquid, at 20°C and 1 atmosphere.			
Color	Light brown			
Smell				
Olfactory threshold	Not applicable			
рН	6			
Melting Point/Freezing Point	Not applicable			
Initial boiling point and boiling interval	Not applicable			
Flash point	Not applicable			
Evaporation rate	Not applicable			
Flammability	Not applicable			
Explosion/Flammability Limits	Not applicable			
Vapor Pressure	Not applicable			
Vapor density	Not applicable			
Relative density	0.9817g/ml			
Solubility	Water soluble			
N-octanol/water partition coefficient	Not applicable			
Self-Ignition Temperature (AIT)	Not applicable			
Decomposition Temperature (°C)	Not applicable			
Viscosity	Not applicable			
Explosive properties	Non-explosive			
Oxidizing properties	Non-oxidizing			
Other information				
None.				

### Section 10- Stability and Reactivity

#### Reactivity

No dangerous reactions are expected when handling and storing according to the provisions. **Chemical Stability** Stable under normal temperature and storage conditions **Possibility of dangerous reactions** None identified. **Conditions to avoid** Stay away from flammable materials/substances, combustibles, strong acids, and reducing agents. **Incompatible Materials** Flammables, combustibles, strong acids, strong alkalis and reducing agents. **Hazardous Decomposition Products** nitrogen oxides (NOx), potassium oxide, potassium nitrite, ammonia, carbon dioxide, carbon monoxide, sulfur oxides, phosphorus oxides.

**General:** Wear clean clothes before application. Inhalation protection: Wear an authorized mask if there is direct and constant contact.

**Eye protection:** Wear authorized goggles and, if necessary, face shield. Hand contact protection: Wear gloves that protect against direct contact.

**Body protection:** Wear clothing to avoid prolonged contact such as a long-sleeved shirt and long pants, shoes, or high boots with socks.

**Ventilation:** Handle the product only in well-ventilated areas. Caution after using the product: Wash hair and body, change clothes, clean protective equipment, and wash equipment used in application with soap and water

#### **Section 11- Toxicological Information**

Not applicable for biological biofungicides

### Section 12- Ecological Information

#### Instability: Very stable.

**Persistence/Degradability:** TricoProtect contains fungi that are found in free form in nature. It is commonly found in various ecological niches such as soil, water, and air.

Bioaccumulation: Not applicable.

Effects on the environment: Not applicable

### **Section 13- Transportation Information**

Overview. Transport the product in the original authorized container and with the authorized label. Secure the load. If there are spills or accidents, they are covered by insurance. It is transported in authorized and conditioned vehicles. Applicable trademarks or signs: Not applicable. Biological. Labelling authorised by the competent authority. The biological product does not constitute a hazardous substance according to transport regulations.

#### **Section 14 - Transport Information**

	Ground Transportation (D.S. 298)	IMDG
No ONU	12, 13 y 15	Not applicable
Official Transportation	Not	Not applicable
Designation	applicable	
Transport hazard class	Not classified	Not classified
Packing Group	Not	Not applicable
	applicable	
Security badge	Not	Not applicable
	applicable	
Particular precautions for users		
None.		
Bulk transport in accordance with A Not classified	Annex II of the MARPOL 73/78 Convent	tion and the IBC Code

#### Section 15- Regulatory Information

### Safety, health and environmental regulations and legislation

Classification according to NCh. 382-2013: Not classified as hazardous. Risk and safety information according to NCh. 2190: Not applicable Supreme Decree No. 78. Regulations for the storage of hazardous substances: Not applicable.

# Section 16 - Other information

### This safety data sheet complies with NCh 2245 Of 2015

The data contained in this sheet are from reliable sources and correspond to the current state of Microendo's knowledge of the product, and do not constitute a warranty on our part. They are intended to describe our products in terms of safety aspects that are required to be known for their handling and/or transport and should not be understood as a guarantee of certain properties. The conditions of safe use of the product are the obligation of the user. This safety data sheet is an unsigned document.

<b>Data Source:</b> This Safety Da		safety data sheets n prepared and is intend	led for this product only		
Date preparation	of Oct- 23	Replaces	Oct-24		
Indication changes:	of Change of format and adjustment of information requirements according to GHS				
Product Names (Section 1)					
	Identified and discouraged uses (section 1)				
	Updating Carrier Phones (Section 1)				
	Identification NCh 1411/4 of. 78 (section 2)				
	Hazard Identifi	cation according to GHS (	section 2)		
		osition (section 3) all sections was reviewed a	and updated.		