**Section 1-** Identification of the hazardous chemical substance or mixture and supplier or manufacturer.

Microendo Inc.

**MANUFACTURER** 

+52 1 33 1133 0388

PHONE NUMBER

**Coldprotect HOME** 

**PRODUCT** 

0.9817g/ml

**DENSITY** 

92°C-94.5°C

**EVAPORATION RANGE** 

Soluble in water

**SOLUBILITY** 

**Viscous liquid** 

**APPEARANCE** 

N/A

**BOILING POINT** 

N/A

FREEZING POINT

The product tends to decompose if not stored properly

**RECOMMENDATIONS** 

The product is not stable at temperatures above 45°C.

**INSTABILITY** 

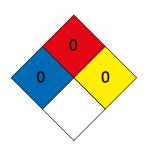
**Section 2-** Hazard identification.

# Not classified as dangerous

CLASSIFICATION ACCORDING TO NCH. 382 OF. 2015

### Not applicable

**IDENTIFICATION ACCORDING TO NCH. 2190 OF. 2003** 



Safety Grades Health Grade: 0 - None Flammability Grade: 0 - None Reactivity Grade: 0 - None Special Grades: None

**IDENTIFICATION ACCORDING TO NCH. 1411/4 OF.78** 

# May cause skin and respiratory tract irritation.

**HEALTH HAZARDS FOR INDIVIDUALS** 

#### No identified

**ENVIRONMENTAL HAZARDS** 

Contact with combustible material will not cause spontaneous ignition, but may exacerbate an existing fire.

PHYSICAL OR CHEMICAL HAZARDS

#### Not applicable

HAZARD CLASS AND CATEGORY

#### Not applicable

HAZARD INDICATION

CLASSIFICATION ACCORDING TO THE GLOBALLY HARMONIZED SYSTEM (6TH EDITION, 2015)

Not applicable
PICTOGRAM
Not applicable
WARNING WORD

Not applicable HAZARD INDICATION

Not applicable

PRECAUTIONARY STATEMENTS

ELEMENTS OF THE LABEL ACCORDING TO THE GLOBALLY HARMONIZED SYSTEM (6TH EDITION, 2015)

# **APPLICATIONS**

**ColdProtect**, owned by Microendo Inc., is the first product developed from the selection of the best microorganisms for plant cold protection, being a patented and unique product in the market.

**ColdProtect** is a bio-inoculant made from a probiotic mixture of different microorganisms that reduces cold stress in plants by inhibiting oxidative stress caused by cold. In addition to strengthening the plant's immune system and enhancing its nutrition, it becomes a perfect cryoprotectant for the plant cells, providing you with a 100% organic solution in a more logical and natural way for the environment.

**ColdProtect** comes from a fresh and metabolically active crop, so its use is recommended upon receipt. Apply either very early or in the afternoon, avoiding long hours of sunlight and solar radiation. The product is applied directly to the base of the plant by setting the nozzle to STREAM mode, before watering the plants.

Do not eat, drink, or smoke during the application, and wash your hands before and after using the product.

#### **Section 3-** Composition of components.

COMPONENTS	% (P/V)
Viable cells of ENTEROBACTER SPP., BURKHOLDERIA SPP.	99.9%
Depleted culture medium	0.1%

# Typically, NO hazard.

CLASSIFICATION OF PRODUCT RISKS

Mild. Does not cause harmful

In case of discomfort
of irritation, stop w

effects if handled and used under normal conditions as suggested on the label.

On the label.

On the label.

On initiation, stop seek medical assistance in the danger area. Provide the danger area.

**HEALTH RISKS TO HUMANS** 

If the product comes into contact with the eyes or skin, irritation may occur. The routes of exposure are oral, inhalation, and ocular. Avoid inhaling spray vapors.

**EFFECTS OF ACUTE OVEREXPOSURE (ONCE)** 

It may irritate the skin in some individuals.

SKIN CONTACT

It may irritate the eyes in some individuals.

**EYE CONTACT** 

It may cause severe stomach discomfort if ingested in large quantities.

INGESTION

Non-toxic product for beneficial bacteria.

**ENVIRONMENTAL HAZARDS** 

None

SPECIAL HAZARDS OF THE PRODUCT

This product is not defined as a hazardous compound. The ingredients of this product are considered non-hazardous.

SPECIFIC RISKS

In case of discomfort or suspicion of irritation, stop working and seek medical assistance quickly. Remove the affected person from the danger area. Preferably to an outdoor location. Assist the affected person and keep them at rest.

**Section 4-** First Aid Measures.

GENERAL

Remove the affected person from the danger area. Preferably to an outdoor location. Assist the affected person and keep them at rest. Call a physician.

INHALATION

Quickly remove contaminated clothing. Wash the affected area with plenty of water and soap. Call a doctor if the skin is irritated.

SKIN CONTACT

Consult a doctor. Bring the product label or safety data sheet. Contact the poison control center. Do not induce vomiting. If it occurs spontaneously, keep the airways clear. Do not give anything orally to an unconscious person or someone having seizures.

INGESTION

There is no specific antidote. Symptomatic treatment should be applied.

**ANTIDOTE** 

Consult a doctor.

Apply first aid measures.

**INGESTION** 

There are no known cases of poisoning.

**HUMAN EXPERIENCES** 

**Section 5-** Firefighting Measures.

#### No

IS IT FLAMMABLE?

Use personal protective equipment. Use water pressure. If the area is heavily exposed to fire and conditions permit, allow the fire to extinguish itself, as water may increase the contaminated area. Evacuate all personnel from the area.

HANDLING IN CASE OF FIRE

Use protective equipment with self-contained breathing apparatus or use an approved respirator mask. Avoid inhaling combustion gases.

PERSONAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTING

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

Ventilate the area. Do not direct water into drains. Do not contaminate water bodies or stored water. Delimit the area to contain the spill by creating a barrier with absorbent materials such as sawdust, sand, or clay.

MEASURES TO TAKE IN CASE OF PRODUCT SPILLS

Use full protective equipment, including long-sleeve shirts, long pants, waterproof gloves, and shoes or boots with socks.

PERSONAL PROTECTIVE EQUIPMENT FOR EMERGENCY RESPONSE

Read fire and spill regulations before acting.

PRECAUTIONS TO TAKE TO AVOID ENVIRONMENTAL DAMAGE

Wash the floor with a strong industrial detergent and rinse with water.

**CLEANUP METHODS** 

Cover the spilled product with sawdust, sand, or clay, or other absorbent materials. Collect with shovels or sweep up. Place it in suitable metal or plastic containers for disposal, in a location authorized for such purposes.

WASTE DISPOSAL METHODS

**Section 7-** Handling and Storage of the Product.

Always read the instructions on the label before using the product. Suggested recommendations in the safety data sheet must be followed.

PRODUCT HANDLING INFORMATION

Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapors. Do not eat, drink, or smoke during application. Safe handling recommendation: Use gloves and protective clothing. Do not inhale; use an approved respirator for organic powders as appropriate.

**PRECAUTIONS** 

Store at ambient temperature. Maximum temperature of 45 °C and minimum of 5 °C. Store away from heat, flames, sparks, and direct sunlight.

STORAGE CONDITIONS

Store only in sealed original containers labeled by the formulator.

RECOMMENDED PACKAGING

**Section 8-** Exposure control and personal protection.

Before using the product, read the authorized label and this safety data sheet if available.

PERSONAL PROTECTIVE EQUIPMENT

**Section 9-** Physical and chemical properties.

## Liquid at 20 °C and 1 atmosphere.

**APPEARANCE** 

### **Light brown**

COLOR

#### Not applicable

**ODOR** 

### Not applicable

**OLFACTORY THRESHOLD** 

6

PH

### Not applicable

MELTING POINT/FREEZING POINT

### Not applicable

INITIAL BOILING POINT AND BOILING RANGE

#### Not applicable

**FLASH POINT** 

#### Not applicable

**EVAPORATION RATE** 

#### Not flammable

**FLAMMABILITY** 

#### Not applicable

**EXPLOSION/FLAMMABILITY LIMITS** 

#### Not applicable

VAPOR PRESSURE

#### Not applicable

**VAPOR DENSITY** 

#### 0.9817g/ml

**RELATIVE DENSITY** 

#### Soluble in water

**SOLUBILITY** 

### Not applicable

DISTRIBUTION COEFFICIENT N-OCTANOL/WATER

### Not applicable

**AUTO-IGNITION TEMPERATURE (AIT)** 

### Not applicable

DECOMPOSITION TEMPERATURE (°C)

#### Not applicable

**VISCOSITY** 

#### Not explosive

**EXPLOSIVE PROPERTIES** 

#### Non-combustible

**COMBUSTIBLE PROPERTIES** 

#### None

OTHER INFORMATION

Section 10- Stability and reactivity.

No hazardous reactions are expected when handled and stored according to the provisions.

**REACTIVITY** 

Stable under normal temperature and storage conditions.

CHEMICAL STABILITY

#### None identified

POSSIBILITY OF HAZARDOUS REACTIONS

Keep away from flammable materials, combustible substances, strong acids, and reducing agents.

**CONDITIONS TO AVOID** 

Flammable, combustible substances, strong acids, strong alkalis, and reducing agents.

INCOMPATIBLE MATERIALS

Nitrogen oxides (NOx), potassium oxide, potassium nitrite, ammonia, carbon dioxide, carbon monoxide, sulfur oxides, phosphorus oxides.

HAZARDOUS DECOMPOSITION PRODUCTS

Use clean clothing before application. Inhalation protection: Use an authorized mask if there is direct and constant contact.

GENERAL

Use authorized protective goggles and, if necessary, a face shield. Wear gloves to protect against direct contact.

**EYE PROTECTION** 

Wear clothing to avoid prolonged contact, such as long-sleeved shirts, long pants, shoes, or high boots with socks.

**BODY PROTECTION** 

Precaution after using the product: Wash hair and body, change clothes, clean protective equipment, and wash the application equipment with water and soap.

**VENTILATION** 

**Section 11-** Toxicological information.

Not applicable for biological biofungicides.

**Section 12-** Ecological information.

### Very stable

**INSTABILITY** 

ColdProtect HOME contains bacteria that are freely found in nature. It is commonly present in various ecological niches such as soil, water, and air.

PERSISTENCE / DEGRADABILITY

### Not applicable

**BIOACCUMULATION** 

### Not applicable

**ENVIRONMENTAL EFFECTS** 

**Section 13-** Transport information.

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

**Section 14-** Transport information.

#### 12, 13 y 15

UN NUMBER (LAND TRANSPORT (D.S. 298))

### Not applicable

UN NUMBER (IMDG)

### Not applicable

OFFICIAL TRANSPORT DESIGNATION (LAND TRANSPORT (D.S. 298) AND IMDG)

#### Not classified

TRANSPORT HAZARD CLASS (LAND TRANSPORT (D.S. 298) AND IMDG)

### Not applicable

PACKING GROUP (LAND TRANSPORT (D.S. 298) AND IMDG)

### Not applicable

SAFETY MARKING (LAND TRANSPORT (D.S. 298) AND IMDG)

#### None

SPECIAL PRECAUTIONS FOR USERS

### Not applicable

BULK TRANSPORT ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Section 15 - Información reglamentaria

#### Not classified as hazardous

**CLASSIFICATION ACCORDING TO ANCH. 382-2013** 

#### Not applicable

RISK AND SAFETY INFORMATION ACCORDING TO ANCH. 2190

### Not applicable

SUPREME DECREE NO 78. REGULATION ON THE STORAGE OF HAZARDOUS SUBSTANCES

**Section 16-** Other Information.

This safety data sheet complies with NCh 2245 Of 2015.

The data provided in this information sheet comes from reliable sources and corresponds to the current state of **Microendo's** knowledge of the product, without constituting a guarantee on our part. It is intended to describe our products in terms of safety aspects required for handling and/or transport and should not be understood as a warranty of specific properties. Safe use conditions of the product are the responsibility of the user.

This safety sheet is an unsigned document.

Safety sheets for raw materials. This safety data sheet has been prepared and is intended only for this product.

DATA SOURCE

Octubre 2023

DATE OF PREPARATION

Octubre 2024

**REPLACES** 

#### Indication of changes

Format change and adjustment of information requirements according to GHS. Product names (Section 1).

Identified and discouraged uses (Section 1).

Supplier phone numbers update (Section 1).

Identification NCh 1411/4 of. 78 (Section 2).

Hazard identification according to GHS (Section 2).

Product composition (Section 3).

Information in all sections has been reviewed and updated.



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