

# SAFETY DATA SHEET



PAG 1 of 5

## THYME GUARD

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Thyme Guard

**Product Use:** Bactericide and fungicide liquid, used as part of a protection program for plants and crops.

**Supplier:** AGRO RESEARCH INTERNATIONAL LLC

Address: 29203 State Road 46.

Sorrento, FL 32776

Telephone: 1 407 302 6116

Emergency phone: 1 407 435 9105

E-Mail: [marc@agroresearchinternational.com](mailto:marc@agroresearchinternational.com)

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	%	CAS #
Thyme oil extract	0 - 23	8007-46-3
Sodium Citrate	0 - 20	994-36-5

### SECTION 3: HAZARDS IDENTIFICATION

Toxicological risk classification according to WHO: IV product that normally causes no harm.

Physical state: Pale yellow liquid with a characteristic odor thyme, noncorrosive and chemically stable in your form liquid. It can cause skin irritation and eye in pure form.

**Potential health effects:**

**Eyes:** Causes eye irritation, ardency, and redness.

**Skin:** Skin dryness and irritation may appear.

**Ingestion:** Causes nausea, vomit, abdominal pain, diarrhea, and drowsiness.

**Inhalation:** Causes throat irritation, headache, nausea and possible drowsiness.

### SECTION 4: FIRST AID MEASURES

**Eye contact:** if you wear contact lenses remove them immediately. Rinse with plenty of water for at least 15 minutes, keeping eyelids open. Seek medical attention if irritation persists.

# SAFETY DATA SHEET



PAG 2 of 5

## THYME GUARD

**Skin contact:** Immediately wash with water. Remove contaminated clothing and wash before use. Apply after moisturizer cream on the affected area. Seek medical attention if irritation develops.

**Inhalation:** if inhaled bring the person immediately to take fresh air. Seek medical attention if discomfort persists.

**Ingestion:** Give plenty of water, never induce vomiting. Seek medical attention if consumed in large quantities.

### SECTION 5: FIRE-FIGHTING MEASURES

**Flammability of the product:** May be flammable. **Flash Point:** (ASTM D-93, °C):  $\geq 62$  (143.6°F)

**Fire Extinguishing:** Use media appropriate for surrounding fire as dry chemical, carbon dioxide or extinguishing foam.

**General Information:** In the case of a fire, wear breathing apparatus. Avoid direct contact with the product, product mists and thermal decomposition products, which may produce oxides of carbon and sulfur and other organic substances.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

Use personal protective equipment recommended. Stop the spill immediately. Pump the product into drums for disposal. Wash the affected area with plenty of water. Do not dump into rivers or lakes, keeping away from drains, surface, and groundwater.

### SECTION 7: HANDLING AND STORAGE

**Handling:** Avoid direct eye contact. Wash thoroughly exposed parts after handling and complies with the recommendations issued by the area of industrial safety.

**Storage:** Store in a clean and dry place. Store in original sealed containers, in a place where the temperature is below 30°C. Do not store with incompatible materials such as strong oxidizing agents, strong acids and alkalis. It must be protected against physical damage and properly labeled.

# SAFETY DATA SHEET



PAG 3 of 5

## THYME GUARD

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Engineering:

Provide adequate ventilation. Install emergency showers and eye wash close to storage and handling areas.

#### Personal Protection:

Eye Protection: Use safety glasses with side shields when handling large quantities.

Skin Protection: Wear clothing and gloves PVC, latex or nitrile gloves during work. Gloves and protective clothing should be worn when working with a prolonged contact in your pure form.

Respiratory Protection: Ventilation should be adequate if you work for a long time use a gas mask respirator with the black cartridge.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid
Colour:	Pale yellow
Odor:	Characteristic of thyme
Viscosity:	< 100 cps at 25°C
Boiling point (°C)	>100°C
Specific gravity (Water = 1)	1,012 at 23°C
Vapor pressure (mm Hg)	N.A.
% Volatile (Wt%)	Aprox 70%
Density (Water = 1)	0,9948 at 21°C
Evaporation rate (Water +1)	< 1
Solubility in water, fats, and organic solvents	Complete
pH	9,0 – 10,5

### SECTION 10: STABILITY AND REACTIVITY

**Chemical stability:** This product is stable under normal storage conditions. It is not polymerized.

**Hazardous decomposition products:** Excessive heat decomposition can produce carbon and sulfur oxides and other organic substances.

# SAFETY DATA SHEET



PAG 4 of 5

## THYME GUARD

**Avoiding conditions:** High temperatures or excessive heat.

**Incompatibilities:** Reactive with strong oxidizing agents, alkalis, and strong acids.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### **Toxicological Information:**

Thyme Guard diluted: They have conducted toxicity studies in which 3 types of toxicity (dermal, oral and inhalation), 2 types of irritation (eye and skin) and a sensitization study were included, which conclude that the product does not generate reaction severe dermal and eye irritation in the least. Single dose acute dermal LD50 of Thyme Guard is greater than 5000 mg / kg body weight in male and female rats. Based on the results of these studies, Thyme Guard meets the requirements of the EPA toxicity category IV for dermal toxicity.

The only inhalation LD50 dose acute Thyme Guard is greater than 2.01 mg / L in male and female rats. Based on the results of these studies, Thyme Guard meets the requirements of the EPA toxicity category IV inhalation toxicity.

#### **Effects of Chronic Exposure:**

Skin Irritation: Frequent contact for prolonged periods can cause skin dryness, redness, and dermatitis, can also generate awareness in some people.

Inhalation Effects: The daily inhalation in large amounts can cause drowsiness, dizziness, nausea and headache.

Carcinogenicity: Not predictable

Mutagenicity: N/A.

Synergistic Materials: Solvents and soaps.

### SECTION 12: ECOLOGICAL INFORMATION

Thyme Guard is completely biodegradable, currently, has certified for WASHINGTON STATE DEPARTMENT AGRICULTURE, that ensure its compliance with the organic standards (7 CFR Part 205) of USDA, as CPA type.

Its active ingredient (thyme oil extract) according to studies is recognized as biodegradable, using OCDE 301E method, biodegradable in 14 days.

The degradation products are not toxic.

# SAFETY DATA SHEET



PAG 5 of 5

## THYME GUARD

### SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of waste in accordance with local regulations. In general, it can be removed through the wastewater down the drain or in an approved landfill, as the organic matter of this product is biodegradable.

### SECTION 14: TRANSPORT INFORMATION

During charging, transfer, transport, unloading, dissolving, mixing and sampling, it is not dangerous as long as precautions are taken use disclosed herein.

### SECTION 15: REGULATORY INFORMATION

Any.

### SECTION 16: ADICIONAL INFORMATION

Date of Issue: September 1st, 2016

Prepared by Agro Research International Inc.

#### References:

The information contained in this safety data sheet material was obtained from sources believed to be accurate and reliable from a technical point of view. Despite that they have been deployed all efforts to ensure full disclosure of product hazards, in some cases, no data are available, which is declared. Whereas the conditions under which the product is used in practice are beyond the control of the supplier, it is assumed that users of this material have been fully trained according to the standards of industrial safety of each user. No express or implied warranties are given, and the provider is not liable for losses, injuries or consequential damages that may result from using or reliance on information contained herein.

#### Abbreviations:

**LD<sub>50</sub>:** Median Lethal Dose of a substance or radiation that is fatal to half of a group of test animals.

**EPA:** United States Environmental Protection Agency

**USDA:** United States Department of Agriculture

**CPA:** Crop Production Aid.

**CFR:** Code of Federal Regulations.