## GRO RESEARCH INTERNATIONAL

## **WEED SLAYER**

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#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Weed Slayer. PART A

**Product Use:** Broad spectrum, nonselective herbicide. **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

#### **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

INGREDIENTS	%	CAS #
Eugenol	0 - 6	97-53-0

#### **SECTION 3: HAZARDS IDENTIFICATION**

Toxicological risk classification according to WHO: U product unlikely to present acute hazard. Physical state: dark brown liquid with a characteristic odor of cloves, noncorrosive and chemically stable in its form liquid.

This material is not a "health hazard" or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration Hazard Communication Standard, 20 CFR 1910.1200.

#### **Health hazards:**

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

**Skin:** brief contact with the skin is not toxic. Repeated or prolonged contact will dehydrate skin.

**Ingestion:** Can cause upper GI tract disturbance. **Inhalation:** Can cause sneezing and coughing.

#### **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.

## **WEED SLAYER**



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**Skin contact:** Immediately wash with water. Remove contaminated clothing and wash before use. Seek medical attention if irritation develops.

**Inhalation:** if it 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: Non-combustible. Flash Point: 0

**Fire Extinguishing:** Non-combustible, use water.

**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, nitrogen oxides 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. Never return spills in original containers for re-use. For waste disposal, see section 13 of the this MSDS. 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 good industrial hygiene practices.

**Storage:** Store in a clean and dry place. Store in original sealed containers, in a place where the temperature is below 90°F (32°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.



## **WEED SLAYER**

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#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Engineering:**

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

#### **Personal Protection:**

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

<u>Skin Protection</u>: 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.

<u>Respiratory Protection</u>: Ventilation should be adequate. In case of insufficient ventilation, wear suitable respiratory equipment.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Liquid
Colour:	Dark brown
Odor:	Characteristic of cloves
Viscosity:	> 5000 cps at 70°F (21°C)
Boiling point (°C)	219°F (104.4°C)
Specific gravity (Water = 1)	≤ 1.46 at 60°F (15.6°C)
Vapor pressure (mm Hg)	Data not available
% Volatile (Wt%)	Data not available
Density (Water = 1)	1.4 at 70°F (21°C)
Solubility in water, fats, and organic solvents	Complete
pH	≤6

#### **SECTION 10: STABILITY AND REACTIVITY**

**Chemical stability:** This product is stable under recommended storage and handling conditions. Stable at normal temperatures and pressure.

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

## **WEED SLAYER**



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**Avoiding conditions:** High temperatures or excessive heat above 120°F (49°C).

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

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure:

Oral effects: Data not available
Skin contact: Data not available
Inhalation effects: Data not available
Eye contact: Data not available

Chronic/Carcinogenicity: Not evidence available

<u>Mutagenicity</u>: Not evidence available Synergistic Materials: Solvents and soaps.

#### **SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity: Data not available

Persistence and degradability: Data not available

Bioaccumulative potential: this product is not bioaccumulative

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of waste in accordance with local regulations. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds.

Empty containers may retain some product residues. This material and its container must be disposed of in a safe manner.

Empty containers should be taken to an approved waste handling site for recycling or disposal.

#### **SECTION 14: TRANSPORT INFORMATION**

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

The transportation of dangerous good act classification for this product is: Not regulated. DOT classification: non-toxic, non-corrosive, chemical NOI, non-hazardous.

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#### **SECTION 15: REGULATORY INFORMATION**

#### FIFRA Requirements:

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) allows for federal control of pesticide distribution, sale and use.

Exemptions for pesticides of a character not requiring FIFRA regulation. The pesticides or classes of pesticides listed in this section have been determined to be of a character not requiring regulation under FIFRA, and are therefore exempt from all provisions of FIFRA when intended for use, and used, only in the manner specified. Eugenol is included on this list.

#### **SECTION 16: ADICIONAL INFORMATION**

Date of Issue: October 10<sup>th</sup>, 2017

Prepared by Agro Research International LLC.

#### **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:**

**WHO:** World Health Organization **CFR:** Code of Federal Regulations

**NOI:** Notice of intent - Chemical safety protocol - notice of intent (NOI)

**DOT:** Department of transportation.

FIFRA: Federal Insecticide, Fungicide and Rodenticide Act.

# AGRO RESEARCH INTERNATIONAL

## **WEED SLAYER**

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#### **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Weed Slayer. PART B

**Product Use:** Broad spectrum, nonselective herbicide. **Supplier:** AGRO RESEARCH INTERNATIONAL Inc.

Address: 29203 State Road 46.

Sorrento, FL 32776

Telephone: 1 407 302 6116 Emergency phone: 1 407 435 9105

E-Mail: marc@agroresearchinternational.com

#### **SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

INGREDIENTS	%	CAS#
DL-Rhamnolipid biosurfactant	0 - 35	N/A

#### **SECTION 3: HAZARDS IDENTIFICATION**

Not regulated under the OSHA Hazard. Communication standard, 29 CFR 1910.1200.

Physical state: Clear colorless liquid, lemon lime aroma. Noncorrosive and chemically stable in your form liquid.

#### Potential health effects:

**Eyes:** Possible ardency and redness.

**Skin:** Non-irritating.

Ingestion: Non-toxic natural phospholipid. Do not ingest.

**Inhalation:** Non-irritating.

#### **SECTION 4: FIRST AID MEASURES**

**Eye contact:** if you wear contact lenses remove them immediately. Rinse with plenty of water for at least 10 minutes, keeping eyelids open. Seek medical attention if irritation persist.

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**Skin contact:** Immediately wash with water. Remove contaminated clothing and wash before use. Seek medical attention if irritation develops.

**Inhalation:** Non-irritating, however if irritation develops, bring the person immediately to take fresh air.

**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: Not combustible.

Flash Point: 123°F (50°C) (Method used: TAG Closed Cap)

Fire Extinguishing: N/A

Unusual fire and explosion hazards: N/A.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Clean up spill with soapy water. No special restrictions on disposal of wash water. Desinfect spill area with clean water to which household bleach is added at a rate of one half cup per five gallons. This material is not considered a hazardous material under the RCRA and may be disposed if in landfills or sanitary services.

#### **SECTION 7: HANDLING AND STORAGE**

**Handling:** Keep containers closed when not in use to prevent contamination of the product and minimize risk of spills. Use good industrial hygiene practices.

**Storage:** Store in a cool and clean dry place. Keep it in original sealed containers, in a place where the temperature is below 95°F (35°C). Do not allow to freeze and keep out of direct sunlight for extended periods of time.



## **WEED SLAYER**

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#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Control Engineering:**

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

#### **Personal Protection:**

**Eye Protection**: Safety goggles are recommended but not required.

Skin Protection: Wear clothing and latex or latex free gloves are recommended, but not required.

<u>Respiratory Protection</u>: Ventilation should be adequate. The use of a filtered mask is recommended but not required.

Long sleeved clothing, long pants and closed toed shoes are recommended.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Liquid
Color	Clear colorless
Odor	Lemon lime
Boiling point (°C)	100°C
Specific gravity (Water = 1)	0.886 g/ml
Vapor pressure (mm Hg)	N.A.
Melting point	N.A.
Vapor density (Air = 1)	N.A.
Evaporation rate (Butyl Acetate = 1)	N.A.
Solubility in water	100% or nearly
Density (g/ml)	0.884 g/ml

#### **SECTION 10: STABILITY AND REACTIVITY**

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

Incompatibility (Materials to Avoid): None

Hazardous decomposition products: None

**Conditions of avoid:** High temperatures or excessive heat.

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#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### **Toxicological Information:**

No toxic effects are known.

**Acute Effects:** May cause mild transient irritation.

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

<u>Skin Irritation</u>: Not known Inhalation Effects: Not known

<u>Carcinogenicity</u>: None <u>Mutagenicity</u>: None

Microorganisms exempt from CDR requirements – 40 CFR 725.

All microbials are considered naturally-derived, non-pathogenic, non-toxic, non-GMO, non-hazardous and non-corrosive.

All microorganisms are not considered to be pathogenic for livestock or poultry.

#### SECTION 12: ECOLOGICAL INFORMATION

The product is readily biodegradable in the natural environment. Spillage may result in a biological oxygen demand. Organisms in the product are naturally occurring in soil.

#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Containers may be rinsed with water and disposed of as approved by local regulations.

#### **SECTION 14: TRANSPORT INFORMATION**

The transportation of Dangerous Good Act classification for this product is: Not regulated. DOT classification: non-toxic, non-corrosive, chemical NOI, non-hazardous.

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#### **SECTION 15: REGULATORY INFORMATION**

NFPA Hazard Rating: Health - 0; Flammability - 0; Instability - 0

HMIS Rating: Health – 0; Flammability – 0; Reactivity – 0

CA Proposition 65: not listed

#### **SECTION 16: ADICIONAL INFORMATION**

Date of Issue: October 10th, 2017

Prepared by Agro Research International LLC

#### 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:**

OSHA: Occupational Safety & Health Administration. (United State, Department of Labor)

**CFR:** Code of Federal Regulations

TAG Closed Tap: Standard test method for flash point tester according to the ASTM D56 and related

test methods.

RCRA: Resource Conservation and Recovery Act. (EPA)

CDR Requirements – 40 CFR 725: Code of Federal Regulations: REPORTING REQUIREMENTS AND REVIEW

PROCESSES FOR MICROORGANISMS

NOI: Notice of intent - Chemical safety protocol - notice of intent (NOI)

**DOT:** Department of transportation.

NFPA: National Fire Protection Association.

HMIS: The Hazardous Materials Identification System