

MATERIAL SAFETY DATA SHEET

Emergency Phone: CHEMTREC 800-424-9300

Effective Date: December 12, 2012

New

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Willowood Abamectin 0.15EC

CHEMICAL NAME: Abamectin

IUPAC NAME: Mixture, typically not less than 80% Avermectin B1a and not more than 20% Avermectin B1b

CHEMICAL FAMILY: Glycoside Insecticide (Acaricide, Miticide and Nematicide)

EPA REGISTRATION NUMBER: 87290-58

COMPANY IDENTIFICATION:

Willowood, LLC

1600 NW Garden Valley Blvd., Suite 120

Roseburg, Oregon 97471

Tel: 877-679-9963

24/7 Health Emergencies: Call 800-858-7378 (National Pesticide Information Center)

2. HAZARDS IDENTIFICATION SUMMARY:

NOTE: Please refer to Section 11 for detailed toxicological information.

EMERGENCY OVERVIEW: ***WARNING!*** Abamectin, 0.15EC is an environmentally hazardous substance. It is toxic if ingested. It can irritate the skin, eyes, and respiratory system, and it can be absorbed through the skin. It may cause an allergic skin reaction. Vapors can cause dizziness or drowsiness. Avoid breathing dust or aerosol.

There is no evidence that Abamectin, Technical is teratogenic, mutagenic, or may be a human carcinogen. Abamectin is moderately toxic to fish and highly toxic to bees. It has low toxicity for birds and animals. Avoid breathing dust or aerosol.

PHYSICAL STATE: Combustible Liquid. May form explosive mixtures in air at temperatures at or above the flash point.

APPEARANCE: Yellowish to amber liquid.

ROUTE OF EXPOSURE: Inhalation, Ingestion, Skin Contact, Skin Absorption, or Eye Contact.

IMMEDIATE EFFECTS:

Eye: Can cause moderate eye irritation. Do not get in eyes.

Skin: Avoid contact with skin and clothing.

Skin Irritation: Unlikely to cause prolonged irritation or sensitization by skin contact.

Ingestion: It is toxic if ingested. Do not take internally.

Inhalation: May be harmful if inhaled. Avoid breathing mist or aerosol. Vapors may cause dizziness or drowsiness.

CHRONIC OR DELAYED LONG-TERM: There is no evidence Abamectin 0.15EC is a human mutagen, teratogen, or carcinogen.

Medical Conditions Aggravated by Exposure: May cause upper respiratory irritation, or temporary irritation to the eyes.

3. COMPOSITION, INFORMATION OF INGREDIENTS:

Components

Name	CAS - No.	EINECS #	Average % by Weight
Abamectin	71751-41-2	265-610-3	2.0
Solvesso 150	64742-94-5		78.0
n-Butanol	71-36-3		10.0
NE			10.0

4. FIRST AID MEASURES:

GENERAL: Have the product container or label with you when calling a poison control center or doctor or taking the exposed person for treatment.

INHALATION: Move the exposed person to fresh air, free from risk of further exposure. If the person is not breathing call 911, then give artificial respiration. Seek medical attention as soon as possible.

EYE CONTACT: Flush with clean, lukewarm water raising upper and lower eyelids at low pressure for 15 minutes. Remove contact lenses, if present, after the first five minutes and continue to rinse the eyes. Seek medical attention if no relief.

SKIN CONTACT: Remove any contaminated clothing. Rinse area with clean water for 15-20 minutes. Call poison control center or doctor for treatment advice.

INGESTION: Call a poison control center or doctor immediately for treatment advice. Have the affected person drink a glass of water if they are conscious and able to swallow. **DO NOT INDUCE VOMITING** unless instructed to do so by a poison control center physician. Lower the head if the exposed person is vomiting to minimize entry into throat and lungs.

NOTES TO PHYSICIAN: There is no specific antidote. Use appropriate supportive and symptomatic treatment as indicated by the patient's condition. Abamectin 0.15EC contains petroleum distillates. Toxicity following ingestion can be mitigated by inducing vomiting with Ipecac and copious amounts of water within 30 minutes of ingestion.

5. FIRE FIGHTING MEASURES:

FLASH POINT: 160 °F. (71 °C.)

AUTOIGNITION TEMPERATURE: N/A.

FLAMMABILITY: Combustible Liquid

FIRE AND EXPLOSION HAZARDS: During a fire, thermal decomposition of Abamectin 0.15EC can produce irritating and toxic oxides of carbon.

SUITABLE EXTINGUISHING MEDIA: Use water spray, dry chemicals, carbon dioxide, or foam.

FIRE FIGHTING INSTRUCTIONS: Wear an encapsulated suit and NIOSH-approved self-contained breathing apparatus while fighting a fire where this product is burning. Keep out of smoke. Fight fire from an upwind position. Cool closed containers exposed to fire with water spray. Dike the area to prevent runoff and contamination of water sources. Equipment or materials involved in pesticide fires may become contaminated.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTIONS: Wear PPE per Section 8. Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

METHODS FOR CLEANING UP: Prevent spilled material from spreading. Keep collected spilled material in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly with water and detergents. Comply with product label instructions and observe all applicable federal, state, and local collection and disposal regulations.

HANDLING AND STORAGE PRECAUTIONS: Use normal safety procedures and good personal hygiene. Wash thoroughly after use and before eating, drinking, chewing gum, or using tobacco.

ADDITIONAL ADVICE: Do not allow material to enter streams, sewers, or other waterways. Abamectin 0.15EC is moderately toxic to fish and highly toxic to many aquatic invertebrates.

7. HANDLING AND STORAGE:

STORAGE TEMPERATURE: Keep containers tightly closed. Avoid temperatures above 100 °F. (38 °C.) or below 32 °F. (0°C.) Store in a cool, dry, well-ventilated area.

SPECIAL SENSITIVITY: Avoid contact with skin and eyes. Wear PPE per Section 8.

HANDLING AND STORAGE PRECAUTIONS: Avoid contact with the product or mist. Use normal safety procedures and good personal hygiene. Remove and wash PPE as soon as possible after handling the product. Wash thoroughly after use, and before eating, drinking, chewing gum, or using tobacco.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION:

EYE PROTECTION: Use approved safety glasses, goggles, or face shield when there is potential for dust exposure to cause irritation to the eyes.

SKIN PROTECTION: Wear chemically resistant gloves (e.g. nitrile, butyl, or neoprene.) Wear a long-sleeved shirt, long pants, shoes, and socks.

RESPIRATORY PROTECTION: Wear a NIOSH-approved respirator if the airborne conditions result in a dust or aerosol forming. A respirator is not normally required for routine handling of Abamectin 0.15EC.

OCCUPATIONAL EXPOSURE LIMITS: None.

ENGINEERING CONTROLS: Provide adequate ventilation when product is used. Eyewash and shower should be provided in mixing and loading areas.

9. PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL FORM: Liquid.

COLOR: Yellow to amber.

ODOR: Petroleum odor.

DENSITY (water=1): 0.96 g/cm³ @ 25 °C.

pH IN WATER: moderately acidic.

SOLUBILITY IN WATER: Slightly soluble.

FLASH POINT: 160 °F. (256 °C.)

10. STABILITY AND REACTIVITY:

STABILITY: This product is a stable material under normal conditions of storage and handling. Avoid storage temperatures below 32 °F. (0 °C.) or above 100 °F. (38 °C.)

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBLES: Avoid contact with strong oxidizing agents.

DECOMPOSITION PRODUCTS: Products of thermal decomposition and/or combustion can include irritating or toxic carbon oxides.

11. TOXICOLOGICAL INFORMATION:

Oral LD₅₀ (rat) = > 300 mg/kg

Dermal LD₅₀ (rat) = > 1000 mg/kg

Inhalation LC₅₀ (rat) = 3 mg/L/4hour

There is no evidence that Abamectin 0.15EC causes cancer in humans, although there is some evidence of a possible carcinogenic effect at very high doses in some animal studies.

There is some evidence that Abamectin can be teratogenic in rats and mice at doses that were acutely toxic.

The majority of tests on Abamectin have not shown it to be mutagenic.

There was no evidence that Abamectin causes skin eye irritation or sensitization in guinea pig studies. It has produced mild eye irritation in some rabbit studies.

The significant routes of exposure are eyes, ingestion, skin contact, and inhalation.

12. ECOLOGICAL INFORMATION:

Dietary LC₅₀ (bobwhite quail) = > 7000 mg/L

Oral LC₅₀ (mallard duck) = > 3,500 mg/L.

(This indicates that Abamectin is only slightly toxic to most bird species.)

96-hour LC₅₀ (rainbow trout) = 0.36 µg/L.

96-hour LC₅₀ (bluegill sunfish) = 0.21 µg/L.

48-hour EC₅₀ (daphnia magna) = 0.36 µg/L.

(This indicates that Abamectin, is moderately toxic to fish and other aquatic organisms.)

Abamectin 0.15EC is highly toxic to honeybees.

Prevent Abamectin 0.15EC from getting into any waterways.

13. DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: Abamectin 0.15EC is a liquid. Wear a NIOSH-approved self-contained breathing apparatus if there is any danger of breathing product mist. Wear other appropriate PPE while

disposing of Abamectin 0.15EC. Dispose of in accordance with label instructions and all local, state, and federal regulations.

14. TRANSPORT INFORMATION:

US DOT (ground) SHIPPING NAME: Abamectin 0.15EC is a toxic liquid pesticide, UN Number 2902, DG Class 6.1, Packing Group III, per 49 CFR Part 172.101(12)(iv).

IATA (air) SHIPPING NAME: Abamectin 0.15EC is a toxic liquid pesticide, UN Number 2902, DG Class 6.1, Packing Group III, per 49 CFR Part 172.101(12)(iv).

IMO (water) SHIPPING NAME: Abamectin 0.15EC is a toxic liquid pesticide, UN Number 2902, DG Class 6.1, Packing Group III, per 49 CFR Part 172.101(12)(iv).

15. REGULATORY INFORMATION:

OSHA STATUS: None.

TSCA STATUS: Exempted, FIFRA regulated.

CERCLA REPORTABLE QUANTITY: None.

CALIFORNIA PROPOSITION 65: Abamectin is known to the state of California to cause birth defects or other reproductive harm.

RCRA STATUS: None.

SARA 302/311/312 HAZARD NOTIFICATION/REPORTING

IMMEDIATE Y **FIRE** Y **SUDDEN RELEASE OF PRESSURE** N
DELAYED Y **REACTIVE** N

SARA TITLE III: Acute health hazard: Yes; Chronic Health Hazard: Yes.

SECTION 302 EXTREMELY HAZARDOUS: None.

SECTION 311/312 HAZARD CATEGORIES: None.

SECTION 313 TOXIC CHEMICALS: Yes.

RIGHT TO KNOW: NJ, PA – Abamectin.

16. OTHER INFORMATION:

National Fire Protection Association (NFPA)

Hazardous Materials Identification System (HMIS)

NFPA		HMIS
	0 Least	
2 Health	1 Slight	2 Health
0 Flammability	2 Moderate	0 Flammability
0 Instability	3 High	0 Reactivity
	4 Severe	H PPE

RISK PHRASES: R20, Harmful by inhalation; R21, Harmful in contact with skin; R22 Harmful if swallowed; R36, Irritating to eyes; and R51, Toxic to aquatic organisms.

SAFETY PHRASES: S2, Keep out of reach of children; S9, Keep container in a well-ventilated place; S25, Avoid contact with eye; S36, Wear suitable protective clothing; S37, Wear suitable gloves; S38, In case of insufficient ventilation, wear suitable respiratory equipment; S39, Wear eye/face protection; S61, Avoid release to the environment; and S62, If swallowed, do not induce vomiting: seek medical advice immediately and show the product container or label.

REASON FOR ISSUE: New.

APPROVAL DATE: 11/15/2012

PREPARED BY: Jack Firkins

REVIEWED BY: Joe Middione

ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
AICS	Australian Inventory of Chemical Substances
CAS#	Chemical Abstract Service Number
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
°C	Celsius temperature scale
CI	China
DSL	Canada Domestic Substances List
ECL	Korean Existing Chemicals List
EEC	European Economic Commission
ENCS	Japanese existing Chemical List
EINECS #	European Inventory of Existing Chemical Substance Number
EU	European Union
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
(Israel)	2001 proposed list of chemical substances to be regulated under Israel Hazardous Substances Law and Regulations List of 1993
IARC	International Agency for Research on Cancer
MAC	Netherlands
MAK	Germany
MITI	Ministry of International Trade and Industry
NA	Not Applicable
ND	Not Determined
NE	Not Established
NIOSH	National Institute of Occupational Safety and Health
NPIC	National Pesticide Information Center
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Act
PICCS	Philippines
PPE	Personal Protective Equipment
Prop	Proprietary
SARA	Superfund Amendments and Reauthorization Act
SWISS	Giftliste 1 and Inventory of Notified New Substances
TSCA	Toxic Substances Control Act
(Taiwan)	List of Toxic Chemical Substances regulated under Taiwan Toxic Chemical Substances Control Act of November 26, 1986
UK	United Kingdom

USA

United States of America

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