

Issuing Date 09-Mar-2023

Revision Date 26-Jan-2024

Revision Number 2

## 1. Identification

**Product identifier**

**Product Name** Willowood Abamectin 0.15LV

**Other means of identification**

**EPA Reg. No.** 87290-68

**UN/ID no** UN2902

**Synonyms** None

**Recommended use of the chemical and restrictions on use**

**Recommended use** Miticide

**Restrictions on use** Use only as directed on product label

**Details of the supplier of the safety data sheet**

**Supplier Address**

Generic Crop Science, LLC  
1887 Whitney Mesa Drive #9740  
Henderson, NV 89014-2069  
1-844-200-FARM (3276)

**E-mail** regulatory@farmersbusinessnetwork.com

**Emergency telephone numbers**

For Emergency Medical Assistance (Human or Animal) contact Rocky Mountain Poison Control at 866-767-5040.

For Chemical Emergency Assistance (Spill, Leak, Fire or Accident) contact CHEMTREC at 800-424-9300 (North America) or 703-527-3887 (International).

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1

**Hazards not otherwise classified (HNOC)**

Not applicable.

**Label elements****Danger****Hazard statements**

Harmful if swallowed.

Fatal if inhaled.

Causes skin irritation.

Causes serious eye damage.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure.

**Precautionary Statements - Prevention**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/clothing and eye/face protection.

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Do not breathe vapor or mist.

Use only outdoors or in a well-ventilated area.

Wear respiratory protection.

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a doctor.

IF ON SKIN: Wash with plenty of water and soap.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a doctor.

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

Rinse mouth.

**Precautionary Statements - Storage**

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant.

**Other information**

May be harmful in contact with skin. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

**Unknown acute toxicity**

7.7 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

57.6972 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

**3. Composition/information on ingredients**

**Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%	Trade secret
Octanamide, N,N-dimethyl-	1118-92-9	20 - 30	*
Benzenesulfonic acid, C10-16-alkyl derivatives, compounds with 2-propanamine	68584-24-7	10 - 20	*
Decanamide, N,N-dimethyl-	14433-76-2	10 - 20	*
Castor oil, ethoxylated	61791-12-6	5 - 10	*
Abamectin [Avermectin B1]	71751-41-2	1 - 5	*
Butylated hydroxytoluene (BHT)	128-37-0	1 - 5	*
Benzene, C10-16-alkyl derivatives	68648-87-3	0.5 - < 1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.

**Inhalation**

If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention.

**Eye contact**

Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

**Skin contact**

Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

**Ingestion**

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Self-protection of the first aider**

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe vapor or mist. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Coughing and/ or wheezing. Difficulty in breathing. Burning sensation.

**Indication of any immediate medical attention and special treatment needed****Note to physicians**

Treat symptomatically.

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b> Large Fire	Dry chemical, CO2 or water spray. Water spray, fog or regular foam.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Pressurized containers may rupture or explode if exposed to sufficient heat.
<b>Hazardous combustion products</b>	Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. Move containers from fire area if you can do it without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible withdraw from area and let fire burn.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

<b>Methods for containment</b>	Stop leak if you can do it without risk.
<b>Methods for cleaning up</b>	Cover with plastic sheet to prevent spreading. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

## 7. Handling and storage

### Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.
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### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep/store only in original container. Protect
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from direct sunlight. Keep in properly labeled containers. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from Incompatible materials.

## 8. Exposure controls/personal protection

### Control parameters

**Exposure Limits** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Butylated hydroxytoluene (BHT) 128-37-0	TWA: 2 mg/m <sup>3</sup> inhalable fraction and vapor	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance** Yellow liquid  
**Physical state** Liquid  
**Color** Yellow  
**Odor** Strongly bitter  
**Odor threshold** No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4.65	solution (1 %)
pH (as aqueous solution)		No data available
Melting point / freezing point		No data available

Initial boiling point and boiling range		No data available
Flash point	> 110 °C / > 230 °F	
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Vapor density		No data available
Relative density		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity	29.2 cP	@ 25 °C
<b>Other information</b>		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC content	No information available	
Liquid Density	0.980 g/cm <sup>3</sup>	
Bulk density	No information available	

## 10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat. Incompatible materials.
Incompatible materials	Oxidizing materials.
Hazardous decomposition products	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

Inhalation	Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components). May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). May be harmful in contact with skin.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on

components).

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

### Acute toxicity

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral) 409.30 mg/kg  
ATEmix (inhalation-dust/mist) 0.108 mg/l

#### Unknown acute toxicity

7.7 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
57.6972 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Octanamide, N,N-dimethyl- 1118-92-9	= 1250 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Decanamide, N,N-dimethyl- 14433-76-2	-	> 5000 mg/kg ( Rat )	> 3550.7 mg/m <sup>3</sup> ( Rat ) 4 h
Castor oil, ethoxylated 61791-12-6	-	> 2000 mg/kg ( Rat )	-
Abamectin [Avermectin B1] 71751-41-2	= 10 mg/kg ( Rat )	= 2000 mg/kg ( Rabbit )	= 1100 mg/m <sup>3</sup> ( Rat ) 4 h
Butylated hydroxytoluene (BHT) 128-37-0	> 2930 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	-
Benzene, C10-16-alkyl derivatives 68648-87-3	> 5000 mg/kg ( Rat )	> 10200 mg/kg ( Rabbit )	-

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes burns. Causes serious eye damage.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Abamectin [Avermectin B1] 71751-41-2	-	-	-	X
Butylated hydroxytoluene (BHT) 128-37-0	-	Group 3	-	-

#### Legend

**IARC (International Agency for Research on Cancer)**

Group 3 - Not Classifiable as to Carcinogenicity in Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

<b>Reproductive toxicity</b>	Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.
<b>STOT - single exposure</b>	May cause respiratory irritation. May cause drowsiness or dizziness.
<b>STOT - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Target organ effects</b>	Eyes. Skin.
<b>Aspiration hazard</b>	No information available.
<b>Other adverse effects</b>	No information available.
<b>Interactive effects</b>	No information available.

**12. Ecological information****Ecotoxicity** Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Castor oil, ethoxylated 61791-12-6	-	LC50: >45mg/L (96h, Danio rerio)	-	-
Butylated hydroxytoluene (BHT) 128-37-0	EC50: =6mg/L (72h, Pseudokirchneriella subcapitata) EC50: >0.42mg/L (72h, Desmodesmus subspicatus)	-	-	-
Benzene, C10-16-alkyl derivatives 68648-87-3	EC50: >1000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: >1000mg/L (96h, Oncorhynchus mykiss)	-	EC50: =0.009mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Octanamide, N,N-dimethyl- 1118-92-9	2.59
Castor oil, ethoxylated 61791-12-6	4.297
Butylated hydroxytoluene (BHT) 128-37-0	5.1

**Other adverse effects** No information available.**13. Disposal considerations****Waste treatment methods**



<b>Waste from residues/unused products</b>	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Do not reuse empty containers.
<b>California Hazardous Waste Status</b>	This product contains one or more substances that are listed with the State of California as a hazardous waste.

## 14. Transport information

### DOT

<b>ID number</b>	UN2902
<b>Proper shipping name</b>	Pesticides, liquid, toxic, n.o.s. (Abamectin)
<b>Hazard Class(es)</b>	6.1
<b>Packing group</b>	III
<b>Hazard Label</b>	Division 6.1 Toxic

### IATA

<b>ID number</b>	UN2902
<b>Proper shipping name</b>	Pesticides, liquid, toxic, n.o.s. (Abamectin)
<b>Hazard Class(es)</b>	6.1
<b>Packing group</b>	III
<b>Hazard Label</b>	Division 6.1 Toxic

### IMDG

<b>ID number</b>	UN2902
<b>Proper shipping name</b>	Pesticides, liquid, toxic, n.o.s. (Abamectin)
<b>Hazard Class(es)</b>	6.1
<b>Packing group</b>	III
<b>Hazard Label</b>	Division 6.1 Toxic, Environmentally Hazardous
<b>Marine Pollutant/Environmentally Hazardous Substance</b>	YES

## 15. Regulatory information

### International Inventories

Contact supplier for inventory compliance status

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Abamectin [Avermectin B1] - 71751-41-2	1.0

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Abamectin [Avermectin B1] - 71751-41-2	Developmental

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol 57-55-6	X	-	X
Abamectin [Avermectin B1] 71751-41-2	X	-	-
Butylated hydroxytoluene (BHT) 128-37-0	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number 87290-68

**16. Other information**

**NFPA** Health hazards 4 Flammability 1 Instability 0 Special hazards -  
**HMIS** Health hazards 3 \* Flammability 1 Physical hazards 0 Personal protection X  
*Chronic Hazard Star Legend \* = Chronic Health Hazard*

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
 Ceiling Maximum limit value \* Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Issuing Date** 09-Mar-2023

**Revision Date** 26-Jan-2024

**Revision Note** Revise emergency phone number.

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**