



# Safety Data Sheet

Issue Date: 03-Feb-2010

Revision Date: 06-Apr-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name

**Quali-Pro Abamectin 0.15 EC**

### Other means of identification

SDS #

ADAMA-137

Registration Number(s)

EPA Reg. No. 66222-210

UN/ID No

UN2902

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

Recommended Use

EPA registered pesticide.

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)  
3120 Highwoods Blvd., Suite 100  
Raleigh, NC 27604

### Emergency Telephone Number

Company Phone Number

1-919-256-9300

Emergency Telephone (24 hr)

For fire, spill and/or leak contact INFOTRAC:

1-800-535-5053 (North America) 1-352-323-3500 (International)

For medical emergencies and health/safety inquiries, contact PROSAR:

1-877-250-9291

## 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

**Appearance** Straw-amber liquid

**Physical State** Liquid

**Odor** None

### Classification

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

**Signal Word****Danger****Hazard Statements**

Toxic if swallowed  
Fatal if inhaled  
Causes skin irritation  
Causes serious eye irritation  
May cause cancer  
May damage 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  
Use personal protective equipment as required  
Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Wear respiratory protection  
Wear eye/face 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  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
Take off contaminated clothing and wash it before reuse  
If skin irritation occurs: Get medical advice/attention  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Immediately call a poison center or doctor/physician  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
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 Hazards**

Very toxic to aquatic life

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
N-methyl-2-pyrrolidone	872-50-4	19-21
2-Ethylhexanol	104-76-7	10.09-10.71
Abamectin	71751-41-2	1.85-2.05

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

#### First Aid Measures

<b>General Advice</b>	If exposed or concerned: Get medical advice/attention. When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
<b>Eye Contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin Contact</b>	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If breathing has stopped, call 911, give artificial respiration. Call a POISON CENTER or doctor/physician.
<b>Ingestion</b>	IF SWALLOWED: call a poison control center or physician immediately. Rinse mouth. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

#### Most important symptoms and effects

<b>Symptoms</b>	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause gastrointestinal disturbance. Nausea. Vomiting.
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#### Indication of any immediate medical attention and special treatment needed

<b>Notes to Physician</b>	Treat symptomatically. Early signs of intoxication include mydriasis (dilate pupils), ataxia (unsteadiness), and muscle tremors. Toxicity follows accidental ingestion of Quali-Pro® Abamectin 0.15 EC and can be minimized by promptly administering activated charcoal. If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and respiratory functionality) as indicated by clinical signs, symptoms, and measurements. In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.
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## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

Not determined.

**Hazardous Combustion Products** Combustion products include but are not limited to carbon monoxide and carbon dioxide.

### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Prevent human exposure to fire, fumes, smoke and products of combustion. Evacuate non-essential personnel.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Use personal protection recommended in Section 8. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Contain and collect with an inert absorbent and place into an appropriate container for disposal. Clean the floor with detergent and water. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep/store only in original container. Store at ambient conditions. Store locked up.

**Incompatible Materials** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**                      The following information is given as general guidance

### **Appropriate engineering controls**

**Engineering Controls**                      THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS OF END USE PRODUCTS CONTAINING THIS MATERIAL, CONSULT THE SDS OR PRODUCT LABEL FOR THE END USE PRODUCT.

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

**Eye/Face Protection**                      Protective eyewear (e.g. goggles or full-face shield).

**Skin and Body Protection**                      Chemical resistant, impermeable gloves. Coveralls over long- or short-sleeved shirt and long pants, chemical-resistant footwear plus socks and head covering (for overhead exposure). Chemical-resistant apron when cleaning equipment, mixing or loading.

**Respiratory Protection**                      Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection.

**General Hygiene Considerations** Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### **Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	None
<b>Appearance</b>	Straw-amber liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Straw-amber		
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
pH	5.1	@ 25°C	
Melting Point/Freezing Point	Not available		
Boiling Point/Boiling Range	Not available		
Flash Point	> 110 °C / > 230 °F	Pensky-Martens Closed Cup (PMCC)	
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Liquid-not applicable		
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	7.5x10 <sup>-8</sup>	@ 25 C	
Vapor Density	Not determined		
Specific Gravity	0.98		
Water Solubility	Miscible in water		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		
Bulk Density	0.987 g/ml		

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

### Conditions to Avoid

See Sec. 7 Handling & Storage.

### Incompatible Materials

None known based on information supplied.

### Hazardous Decomposition Products

Thermal decomposition may produce the following: Carbon monoxide and carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact**      Causes serious eye irritation.

**Skin Contact**      Causes skin irritation.

**Inhalation**      Fatal if inhaled.

**Ingestion**      Toxic if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
N-methyl-2-pyrrolidone 872-50-4	= 3598 mg/kg ( Rat )	= 8 g/kg ( Rabbit )	= 3.1 mg/L ( Rat ) 4 h
2-Ethylhexanol 104-76-7	1516 - 2774 mg/kg ( Rat )	= 1980 mg/kg ( Rabbit )	-
Abamectin 71751-41-2	28.47 mg/kg	200-2000 mg/kg	0.055-0.21 mg/l

### Information on physical, chemical and toxicological effects

**Symptoms**      Please see section 4 of this SDS for symptoms.

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

**Carcinogenicity**      May cause cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Abamectin 71751-41-2		Group 2A		X

#### Legend

*IARC (International Agency for Research on Cancer)*

*Group 2A - Probably Carcinogenic to Humans*

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

*X - Present*

<b>Reproductive toxicity</b>	May damage fertility or the unborn child.
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b>STOT - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects. This pesticide is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
N-methyl-2-pyrrolidone 872-50-4	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	4000: 96 h <i>Leuciscus idus</i> mg/L LC50 static 1072: 96 h <i>Pimephales promelas</i> mg/L LC50 static 1400: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 832: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static		4897: 48 h <i>Daphnia magna</i> mg/L EC50
2-Ethylhexanol 104-76-7	11.5: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	32 - 37: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 7.5: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 27 - 29.5: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 29.7: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10.0 - 33.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static		39: 48 h <i>Daphnia magna</i> mg/L EC50
Abamectin 71751-41-2		Rainbow Trout LC50: 4.3 µg/l		<i>Daphnia Magna</i> LC50: 0.47 µg/l

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
N-methyl-2-pyrrolidone 872-50-4	-0.46
2-Ethylhexanol 104-76-7	3.1

**Other Adverse Effects**

Not determined

### 13. DISPOSAL CONSIDERATIONS

#### Waste Treatment Methods

<b>Disposal of Wastes</b>	Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Abamectin 71751-41-2	Toxic

### 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances. Based on package size, product may be eligible for limited quantity exception.

#### DOT

<b>UN/ID No</b>	UN2902
<b>Proper Shipping Name</b>	Pesticides, liquid, toxic, N.O.S. (abamectin)
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III

#### IATA

<b>UN/ID No</b>	UN2902
<b>Proper Shipping Name</b>	Pesticides, liquid, toxic, N.O.S. (abamectin)
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>Description</b>	Marine Pollutant

#### IMDG

<b>UN/ID No</b>	UN2902
<b>Proper Shipping Name</b>	Pesticides, liquid, toxic, N.O.S. (abamectin)
<b>Hazard Class</b>	6.1
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO



## 15. REGULATORY INFORMATION

### International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
N-methyl-2-pyrrolidone	Present	X		Present		Present	X	Present	X	X
2-Ethylhexanol	Present	X		Present		Present	X	Present	X	X
Abamectin								Present		

#### Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

### US Federal Regulations

#### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### 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	CAS No	Weight-%	SARA 313 - Threshold Values %
N-methyl-2-pyrrolidone - 872-50-4	872-50-4	20	1.0
Abamectin - 71751-41-2	71751-41-2	1.85-2.05	1.0

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
N-methyl-2-pyrrolidone - 872-50-4	Developmental
Abamectin - 71751-41-2	Developmental

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
N-methyl-2-pyrrolidone 872-50-4	X	X	X
2-Ethylhexanol 104-76-7		X	X
Abamectin 71751-41-2	X		

**EPA Pesticide Registration Number** 66222-210**EPA Statement**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**EPA Pesticide Label**

Signal Word: Warning

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes. Harmful if absorbed through skin or inhaled. Avoid contact with skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

**Difference between SDS and EPA pesticide label**

	EPA	OSHA
<b>Signal Word</b>	Warning	Danger
Acute toxicity - Oral	May be fatal if swallowed	Toxic if swallowed
Acute toxicity - Dermal	Harmful if absorbed through skin	N/A
Acute toxicity - Inhalation (Vapors)	Harmful if inhaled	N/A
Acute toxicity - Inhalation (Dusts/Mists)	N/A	Fatal if inhaled
Skin corrosion/irritation	N/A	Causes skin irritation
Serious eye damage/eye irritation	Causes substantial but temporary eye injury	Causes serious eye irritation
Carcinogenicity	N/A	May cause cancer
Reproductive toxicity	N/A	May damage fertility or the unborn child
STOT - single exposure	N/A	May cause respiratory irritation
STOT - repeated exposure	N/A	Causes damage to organs through prolonged or repeated exposure

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	1	0	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2	1	0	Not determined

**Issue Date:** 03-Feb-2010  
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**Revision Note:** New format

**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**

