



# Safety Data Sheet

Issue Date: 14-Mar-2011

Revision Date: 04-Sept-2015

Version 2

## 1. IDENTIFICATION

### Product Identifier

Product Name **ABBA ULTRA**

### Other means of identification

SDS # MANA-001

Registration Number(s) EPA Reg. No. 66222-226  
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.  
3120 Highwoods Blvd., Suite 100  
Raleigh, NC 27604  
1-919-256-9300

### Emergency Telephone Number

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

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. Please see Section 15 for additional EPA information.

**Appearance** Amber liquid

**Physical State** Liquid

**Odor** Light organic

### Classification

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

### Signal Word

**Danger**

**Hazard Statements**

Fatal if swallowed  
 Harmful if inhaled  
 Causes skin irritation  
 Causes serious eye irritation  
 May cause respiratory irritation. May cause drowsiness or dizziness  
 May cause damage to organs through prolonged or repeated exposure  
 Combustible liquid



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
 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  
 Call a poison center or doctor/physician if you feel unwell  
 If skin irritation occurs: Get medical advice/attention  
 Take off contaminated clothing and wash it before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Call a poison center or doctor/physician if you feel unwell  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth  
 IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

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

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Very toxic to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical Family** Abamectin: Mixture of avermectins comprising mainly Avermectin B1a.

Chemical Name	CAS No	Weight-%
Abamectin	71751-41-2	3.74
Proprietary Solvent	Proprietary	>10
Proprietary Additive	Proprietary	<1

\*\*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**

- General Advice** Get medical advice/attention if you feel unwell. Provide this SDS to medical personnel for treatment.
- Eye Contact** 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.
- Skin Contact** IF ON SKIN: Wash with plenty of soap and water. Call a poison center or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/ attention. Take off contaminated clothing and wash it before reuse.
- Inhalation** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Ingestion** Rinse mouth. IF SWALLOWED: call a poison control center or physician immediately. Rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**Most important symptoms and effects**

- Symptoms** Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness), and muscle tremors.

**Indication of any immediate medical attention and special treatment needed**

- Notes to Physician** Toxicity follows accidental ingestion of the ABBA® Ultra 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 parenteral 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.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Foam. Carbon dioxide (CO2). Dry chemical.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

This is a class IIIB combustible liquid.

**Hazardous Combustion Products** Smoke, fumes or vapors, and oxides of carbon.

**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. Evacuate non-essential personnel from area to prevent human exposure to fire, smoke, fumes or products of combustion.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment as required.

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment** Keep spills out of streams and domestic water supplies. Dike to prevent contamination of local water sources. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

**Methods for Clean-Up** Clean up small spills immediately, use proper personal protection. Absorb spill with absorbent material such as pet litter. After removal, flush contaminated area thoroughly with water containing a strong detergent. Sweep up and place in a chemical container. Seal the container and handle in an approved manner. For waste disposal, see section 13 of the SDS.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing and eye/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep containers closed when not in use. Do not reuse this container. Handle and open container with care. 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. Store locked up. Do not contaminate water, food or feed by storage, disposal or by cleaning equipment.

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

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Proprietary Additive	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**

Please refer to the product label. Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

**Eye/Face Protection**

Protective eyewear (e.g. goggles or full-face shield).

**Skin and Body Protection**

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. Chemical-resistant gloves, such as barrier laminate or butyl rubber >=14 mils.

**Respiratory Protection**

In areas with inadequate ventilation a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a self-contained breathing apparatus may be required when working with this product.

**General Hygiene Considerations**

Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling. Promptly remove any clothing that becomes wet or contaminated. Wash contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Light organic
<b>Appearance</b>	Amber liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Amber		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	3.95	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	Not determined	
<b>Flash Point</b>	>92 °C / 198 °F	Tag Closed Cup
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Not determined	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	.962 g/cc @23°C	(1=Water)
<b>Water Solubility</b>	Not determined	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	
<b>Decomposition Temperature</b>	Not determined	
<b>Kinematic Viscosity</b>	47.1 centipoise	@ 23°C
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

**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**

Keep out of reach of children.

**Incompatible Materials**

None known based on information supplied.

**Hazardous Decomposition Products**

Smoke, fumes or vapors, and oxides of carbon.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

**Eye Contact**                                      Causes serious eye irritation.

**Skin Contact**                                      Causes skin irritation.

**Inhalation**    Harmful if inhaled.

**Ingestion**    Fatal if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary Solvent	= 3598 mg/kg ( Rat )	= 2500 mg/kg ( Rat ) > 5000 mg/kg ( Rabbit )	= 3.1 mg/L ( Rat ) 4 h
Abamectin 71751-41-2	-	-	= 1100 mg/m <sup>3</sup> ( Rat ) 4 h
Proprietary Additive	= 890 mg/kg ( Rat )	-	-

**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**                                      Group 3 IARC components are "not classifiable as human carcinogens".

Chemical Name	ACGIH	IARC	NTP	OSHA
Abamectin 71751-41-2		Group 2A		X
Proprietary Additive		Group 3		

**STOT - single exposure** May cause respiratory irritation. May cause drowsiness or dizziness.

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Product Information (Numerical measures of toxicity)**

**Acute Oral LD50 (Rat):** 236 mg/kg

**Acute Dermal LD50 (Rabbit):** >2,020 mg/kg

**Acute Inhalation LC50 (Rat):** >2.17 mg/L (4-hr)

**Eye Irritation:** Minimally irritating.

**Dermal Irritation:** Slightly irritating.

**Dermal Sensitization:** Not a skin sensitizer.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

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.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Methyl pyrrolidone 872-50-4	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	832: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 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		4897: 48 h <i>Daphnia magna</i> mg/L EC50
Proprietary Additive	6: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 0.42: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	5: 48 h <i>Oryzias latipes</i> mg/L LC50		

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Methyl pyrrolidone 872-50-4	-0.46
Proprietary Additive	4.17

**Other Adverse Effects**

PRODUCT DATA:

Rainbow Trout 96-hour LC50: 4.3 ug/L

*Daphnia magna* 48-hour LC50: 0.47 ug/L

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes**

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.  
 PRODUCT DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated Packaging**

Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

**California Hazardous Waste Status**

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

**14. TRANSPORT INFORMATION**

**DOT**

Note: Packages with inner packaging not over 5 liters (1.3 gallons) each may be reclassified as Limited Quantity.

Inner packages greater than 5L/ 1.3 gal:

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

**IATA**

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

**IMDG**

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

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** All ingredients are listed or exempt from listing on Chemical Substance Inventory

**Legend:**

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

**US Federal Regulations**



**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**SARA 313**

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Proprietary Solvent	Proprietary	>10	1.0
Abamectin - 71751-41-2	71751-41-2	3.74	1.0

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals.

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

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Proprietary Solvent	X	X	X
Abamectin 71751-41-2	X		
Proprietary Additive	X	X	X

**EPA Pesticide Registration Number** 66222-226

**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
- Acute toxicity – Oral: May be fatal if swallowed
- Acute toxicity – Dermal: Harmful if absorbed through the skin
- Acute toxicity - Inhalation (Dusts/Mists): Harmful if inhaled
- Serious eye damage/eye irritation: Causes moderate eye damage

**Difference between SDS and EPA pesticide label**

	<b>EPA</b>	<b>OSHA</b>
Signal Word	Warning	Danger
Acute toxicity - Oral	May be fatal if swallowed	Fatal if swallowed
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Acute toxicity - Inhalation (Dusts/Mists)	Harmful if inhaled	Harmful if inhaled
Skin corrosion/irritation	N/A	Causes skin irritation
Serious eye damage/eye irritation	Causes moderate eye damage	Causes serious eye irritation
Specific target organ toxicity (single exposure)	N/A	May cause respiratory irritation May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	N/A	May cause damage to organs through prolonged or repeated exposure
Flammable Liquids	N/A	Combustible liquid

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	1	0	None
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2	1	0	See Section 8

**Issue Date:** 14-Mar-2011  
**Revision Date:** 04-Sept-2015  
**Revision Note:** Updated format from 11-Nov-2013

**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**