1. Identification

Product identifier
ABBA ULTRA

Other means of identification
SDS number
565
Product registration number
5481-621

Recommended use
Insecticide

Recommended restrictions
No other uses are advised.
Keep out of the Reach of Children!

EPA Registration number
EPA: 5481-621

Manufacturer/Importer/Supplier/Distributor information

Manufacturer
AMVAC Chemical Corporation

Address
Suite 1200
4695 MacArthur Court
Newport Beach, CA 92660
United States

Telephone
AMVAC Chemical Corp
949-260-1200
AMVAC Chemical Corp
949-260-6270 (FAX)

Website
www.amvac.com

E-mail
CustServ@amvac.com

Emergency phone number
Medical
888-681-4261
CHEMTREC®
800-424-9300

(USA+Canada)

Product Use
888-462-6822
CHEMTREC® (Outside USA)
+1-703-527-3887

2. Hazard(s) identification

Physical hazards
Flammable liquids
Category 4

Health hazards
Acute toxicity, oral
Category 3
Acute toxicity, inhalation
Category 4
Specific target organ toxicity, single exposure
Category 3 respiratory tract irritation
Specific target organ toxicity, repeated exposure
Category 2

Environmental hazards
Hazardous to the aquatic environment, acute hazard
Category 2
Hazardous to the aquatic environment, long-term hazard
Category 2

OSHA defined hazards
Not classified.

Label elements

Signal word
Danger
Hazard statement

Combustible liquid.
Toxic if swallowed.
Harmful if inhaled.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention

Keep away from flames and hot surfaces-No smoking.
Do not breathe mist or vapor.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.
Wear protective gloves/eye protection/face protection.
Wash thoroughly after handling.

Response

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Rinse mouth.
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
Call a physician or poison control center if you feel unwell.
Collect spillage. In case of fire: Use CO2, dry chemical, or foam for extinction.

Storage

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

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

This is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced in section 15. The pesticide label also includes other important information, including directions for use.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abamectin</td>
<td></td>
<td>71751-41-2</td>
<td>3.83</td>
</tr>
<tr>
<td>Proprietary Solvent</td>
<td>Proprietary</td>
<td>&gt; 10</td>
<td></td>
</tr>
<tr>
<td>Proprietary Additive</td>
<td>Proprietary</td>
<td>0.92</td>
<td></td>
</tr>
</tbody>
</table>

**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

Inhalation

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.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation. May cause respiratory irritation. Prolonged exposure may cause chronic effects.
Treat symptomatically. Toxicity following accidental ingestion of this product 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.

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

**Suitable extinguishing media**
Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Siphon the spilled liquid into a recovery drum for reuse or disposal, depending on the circumstances. Clean the area as described for a small spill. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry. Absorb cleanup materials with inert absorbent and sweep into the same disposal drum used for the small spill. Close the drum and dispose as a hazardous waste.

**Environmental precautions**
Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

**Precautions for safe handling**
Keep away from open flames, hot surfaces and sources of ignition. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**
Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not contaminate water, other pesticides, fertilizer, food or feed products.
8. Exposure controls/personal protection

Occupational exposure limits
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Additive</td>
<td>TWA</td>
<td>2 mg/m³</td>
<td>Inhalable fraction and vapor.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Additive</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. Workplace Environmental Exposure Level (WEEL) Guides</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Solvent</td>
<td>TWA</td>
<td>40 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices</th>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Solvent</td>
<td>100 mg/l</td>
<td>5-Hydroxy-N-methyl-2-pyrrolidone</td>
<td>Urine</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation
Proprietary Solvent (CAS Proprietary) Can be absorbed through the skin.

US WEEL Guides: Skin designation
Proprietary Solvent (CAS Proprietary) Can be absorbed through the skin.

Appropriate engineering controls
Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles). If there is a potential for splashing Goggles or a full face shield should be used.

Skin protection
Hand protection
Wear protective gloves. Chemical resistant gloves, such as barrier laminate or butyl rubber ≥14 mils.

Other
Wear suitable protective clothing. Long-sleeved shirt and long pants or coveralls, socks and chemical resistant closed toe shoes are required. If there is a possibility of splashing or spillage, a chemical resistant apron or chemical resistant coverall should also be worn.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. For exposures that may exceed the TLV, a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) is required. A full-face respirator or a SCBA may be required if misting or spashing are possible.

Thermal hazards
Not available.

General hygiene considerations
When using do not smoke. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Physical state
Liquid.

Form
Liquid.

Color
Amber
Odor: Light organic.

Odor threshold: Not available.

pH: 3.95

Melting point/freezing point: Not available.

Initial boiling point and boiling range: Not available.

Flash point: > 198 °F (> 92 °C) Closed Cup

Evaporation rate: Not available.

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits:
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: Not available.

Solubility(ies):
- Solubility (water): Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

Other information:
- Explosive properties: Not explosive.
- Kinematic viscosity: 47.1 centipoise @ 23°C
- Oxidizing properties: Not oxidizing.
- Specific gravity: 0.962 @ 23°C

10. Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: Hazardous polymerization does not occur.

Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point.


Hazardous decomposition products: Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

11. Toxicological information

Information on likely routes of exposure:
- Inhalation: Harmful if inhaled.
- Skin contact: Causes slight skin irritation.
- Eye contact: Direct contact with eyes may cause temporary irritation.
- Ingestion: Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics: May cause respiratory irritation. Mild skin irritation.

Information on toxicological effects:
- Acute toxicity: Toxic if swallowed. Harmful if inhaled. Causes slight skin irritation. Causes slight eye irritation.
### Test Results

**Product**
- **ABBA ULTRA**

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbit</td>
<td>LD50 &gt; 2020 mg/kg</td>
</tr>
<tr>
<td>Rat</td>
<td>LC50 &gt; 2.17 mg/l, 4 h</td>
</tr>
<tr>
<td>Rat</td>
<td>LD50 236 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
- Causes slight skin irritation.

**Serious eye damage/eye irritation**
- Direct contact with eyes may cause temporary irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**
  - Not a respiratory sensitizer.
- **Skin sensitization**
  - Not a skin sensitizer.
- **Germ cell mutagenicity**
  - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- **Carcinogenicity**
  - Not classifiable as to carcinogenicity to humans.

#### IARC Monographs. Overall Evaluation of Carcinogenicity
- Proprietary Additive (CAS Proprietary)
  - 3 Not classifiable as to carcinogenicity to humans.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
- Not listed.

#### US. National Toxicology Program (NTP) Report on Carcinogens
- Not listed.

**Reproductive toxicity**
- This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
- May cause respiratory irritation. May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**
- May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
- Not an aspiration hazard.

**Chronic effects**
- May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**
- Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abamectin (CAS 71751-41-2)</td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Acute</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>LC50</td>
<td>Daphnia 0.47 µg/l, 96 h</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow Trout (oncorhynchus mykiss) 4.3 µg/l, 96 h</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
- No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**
- **Partition coefficient n-octanol / water (log Kow)**
  - Proprietary Solvent -0.54

**Mobility in soil**
- No data available.

**Other adverse effects**
- No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN2902
UN proper shipping name Pesticides, liquid, toxic, n.o.s. (Abamectin)
Transport hazard class(es)
- Class 6.1(PGIII)
- Subsidiary risk -
- Label(s) 6.1
- Packing group III
Environmental hazards
- Marine pollutant No
- Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
- Special provisions IB3, T7, TP2, TP28
- Packaging exceptions 153
- Packaging non bulk 203
- Packaging bulk 241

IATA

UN number UN2902
UN proper shipping name Pesticides, liquid, toxic, n.o.s. (Abamectin)
Transport hazard class(es)
- Class 6.1(PGIII)
- Subsidiary risk -
- Label(s) 6.1
- Packing group III
Environmental hazards
- Yes, if shipped over large bodies of water
- Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN2902
UN proper shipping name Pesticides, liquid, toxic, n.o.s. (Abamectin), MARINE POLLUTANT
Transport hazard class(es)
- Class 6.1(PGIII)
- Subsidiary risk -
- Label(s) 6.1
- Packing group III
Environmental hazards
- Yes
- Marine pollutant Not available.
- Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Not established.
General information
IMDG Regulated Marine Pollutant. Limited quantities of this product (≤ 5.0 kg/11 lbs or ≤ 5 L/1.3 gal) are excepted from labeling requirements (49CFR§173.153). A limited quantity label is to be used instead.

15. Regulatory information
US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA. This is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.
WARNING: May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing. Causes moderate eye irritation.

ENVIRONMENTAL HAZARDS
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 areas treated. Do not contaminate water when disposing of equipment washwater 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.
For additional information see the label.

PHYSICAL OR CHEMICAL HAZARDS
Do not store near heat or open flame. This product is reactive toward and should be stored away from strong oxidants.
Material name: ABBA ULTRA
1713 Version #: 2.0 Revision date: Sep-01-2020 Issue date: Aug-11-2017
AMVAC Chemical Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user’s responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

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HMIS is a trademark of the American Coatings Association.
NFPA is a trademark of the National Fire Protection Association, Inc.

Hazard(s) identification: Hazard statement
Hazard(s) identification: Prevention
Hazard(s) identification: Response
Hazard(s) identification: Supplemental information
First-aid measures: Inhalation
Handling and storage: Conditions for safe storage, including any incompatibilities
Stability and reactivity: Conditions to avoid
Regulatory information: California Proposition 65
Regulatory information: European Union
Regulatory information: Safe Drinking Water Act (SDWA)
Other information, including date of preparation or last revision: Disclaimer
GHS: Classification