An American Vanguard Company

SAFETY DATA SHEET

1. Identification

Product identifier ABBA ULTRA

Other means of identification

SDS number 565

Product registration

number

5481-621

Insecticide Recommended use

Recommended restrictions No other uses are advised.

Keep out of the Reach of Children!

EPA: 5481-621 **EPA Registration number**

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

AMVAC Chemical Corporation Company name

Address 4695 MacArthur Court

Suite 1200

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 +1-703-527-3887

USA)

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

Category 2

Category 2

Specific target organ toxicity, repeated

exposure

Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements

Environmental hazards

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 poison center/doctor 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 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.

Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Abamectin		71751-41-2	3.83
Proprietary Solvent		Proprietary	> 10
Proprietary Additive		Proprietary	0.92

^{**}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.

Material name: ABBA ULTRA SDS

1713 Version #: 2.0 Revision date: Sep-01-2020 Issue date: Aug-11-2017

Indication of immediate medical attention and special treatment needed

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 believe 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.

General information

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.

Specific methods Use standard

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

Combustible liquid.

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.

HIC	ACCIL	Threshold	1 ::4	Values
us	AC:(41H	Inresnoid	I imit	values

Components	Туре	Value	Form
Proprietary Additive	TWA	2 mg/m3	Inhalable fraction and vapor.
US. NIOSH: Pocket Guide to C	hemical Hazards		
Components	Туре	Value	
Proprietary Additive	TWA	10 mg/m3	
US. Workplace Environmental	Exposure Level (WEEL) Guides		
Components	Туре	Value	
Proprietary Solvent	TWA	40 mg/m3	
		10 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Proprietary Solvent	100 mg/l	5-Hydroxy-N-m ethyl-2-pyrrolid one	Urine	*

^{* -} 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

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

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

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 splashing are possible.

Thermal hazards Not available.

General hygiene 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 considerations

smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid. Liquid. **Form** Amber Color

Material name: ABBA ULTRA 1713 Version #: 2.0 Revision date: Sep-01-2020 Issue date: Aug-11-2017 Odor Light organic.
Odor threshold Not available.

pH 3.95

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

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 Solubility(ies)

Solubility (water)

Auto-ignition temperature

Decomposition temperature

Viscosity

Not available.

Not available.

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

ReactivityThe 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 Hazardous polymerization does not occur.

Not available.

reactions

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid

temperatures exceeding the flash point.

Incompatible materials Strong oxidizing agents. Peroxides. Phenols.

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 contactCauses slight skin irritation.Eye contactDirect 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.

Product Species Test Results

ABBA ULTRA

Acute Dermal

Liquid

LD50 Rabbit > 2020 mg/kg

Inhalation

Mist

LC50 Rat > 2.17 mg/l, 4 h

Oral *Liquid*

LD50 Rat 236 mg/kg

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 mutagenicityNo 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 toxicityThis 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.

Components Species Test Results

Abamectin (CAS 71751-41-2)

Aquatic

Acute

Crustacea LC50 Daphnia 0.47 μ g/l, 96 h Fish LC50 Rainbow Trout (oncorhynchus mykiss) 4.3 μ g/l, 96 h

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 instructionsCollect 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

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 exceptions153Packaging non bulk203Packaging bulk241

IATA

UN number UN2902

UN proper shipping name Pesticid

Transport hazard class(es)

ame Pesticides, liquid, toxic, n.o.s. (Abamectin)

Class 6.1(PGIII) Subsidiary risk -

Label(s) 6.1
Packing group

Environmental hazards Yes, if shipped over large bodies of water

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN2902

UN proper shipping name Transport hazard class(es) Pesticides, liquid, toxic, n.o.s. (Abamectin), MARINE POLLUTANT

Class 6.1(PGIII)

Subsidiary risk Label(s) 6.1
Packing group III

Environmental hazards

Marine pollutant Yes

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to N

Annex II of MARPOL 73/78 and

Not established.

the IBC Code



IATA; IMDG



Marine pollutant



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.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Proprietary Solvent (CAS Proprietary) 1.0 % Annual Export Notification required.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard Flammable (gases, aerosols, liquids, or solids)

categories Acute toxicity (any route of exposure)

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Abamectin	71751-41-2	3.83	
Proprietary Solvent	Proprietary	> 10	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Contains component(s) regulated under the Safe Drinking Water Act.

(SDWA)

US state regulations

California Proposition 65



WARNING: This product can expose you to chemicals including Proprietary Solvent, which is known to the

State of California to cause birth defects or other reproductive harm. For more information go

to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Developmental toxin

Abamectin (CAS 71751-41-2) Listed: December 3, 2010 Proprietary Solvent (CAS Proprietary) Listed: June 15, 2001

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Proprietary Solvent (CAS Proprietary)

International Inventories

United States & Puerto Rico

Country(s) or region Inventory name

On inventory (yes/no)*

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Toxic Substances Control Act (TSCA) Inventory

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue dateAug-11-2017Revision dateSep-01-2020

References

ACGIH®: American Conference of Governmental Industrial Hygienists

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

EPA: Environmental Protection Agency

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act International Agency for Research on Cancer IARC:

National Toxicology Program NTP:

OSHA: Occupational Safety and Health Agency

SARA: Superfund Amendments and Reauthorization Act

TSCA: Toxic Substances Control Act Department of Transportation DOT:

IMDG: International Maritime Dangerous Goods IATA: International Air Transport Association

Version # 2.0

Health: 2* **HMIS®** ratings

Flammability: 1 Physical hazard: 0

Health: 2 NFPA ratings

Flammability: 1 Instability: 0

Disclaimer

Revision information

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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NFPA is a trademark of the National Fire Protection Association, Inc. Product and Company Identification: Product and Company Identification

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

Material name: ABBA ULTRA SDS US

1713 Version #: 2.0 Revision date: Sep-01-2020 Issue date: Aug-11-2017