

SAFETY DATA SHEET

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 Cl	nildren!
EPA Registration number	EPA: 5481-621	
Manufacturer/Importer/Supplier/	Distributor information	
Manufacturer		
Company name	AMVAC Chemical Corporati	on
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)
	Product Use	888-462-6822
Website	www.amvac.com	
E-mail	CustServ@amvac.com	
Emergency phone number	Medical	888-681-4261
		800-424-9300
	(USA+Canada) CHEMTREC® (Outside	+1-703-527-3887
	USA)	

2. Hazard(s) identification

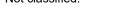
Physical hazards	Flammable liquids	Category 4
Health hazards	Acute toxicity, oral	Category 3
	Acute toxicity, inhalation	Category 4
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	

OSHA dellied liazai

Signal word

Hazard statement

Label elements





Combustible liquid. Toxic if swallowed. Harmful if inhaled. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Keep away from flames and hot surfaces No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe mist/vapors. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wash thoroughly after handling.
Response	If swallowed: Immediately call a poison center/doctor. Rinse mouth. Specific treatment (see this label). If inhaled: Remove person to fresh air and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. Collect spillage.
Storage	Store in a well-ventilated place. Keep cool. 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

Chemical name	Common name and synonyms	CAS number	%
Abamectin		71751-41-2	3.83
Proprietary Solvent 1*		Proprietary*	> 10
Proprietary Solvent 2*		Proprietary*	5-10
Proprietary Additive*		Proprietary*	0.92

*Designates that a 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. Oxygen or artificial respiration if needed. Call a poison center or doctor/physician for further treatment advice.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center for treatment advice.
Eye contact	Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. 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. Prolonged exposure may cause chronic effects.
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 exposed or concerned: Get medical advice/attention. 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 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/vapors. 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. 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.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
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	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Should be handled in closed systems, if possible. Pregnant or breastfeeding women must not handle this product. Keep away from open flames, hot surfaces and sources of ignition. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Do not breathe mist/vapors. Do not taste or swallow. Avoid prolonged exposure. Avoid release to the environment.
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.

US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
Proprietary Additive	TWA	2 mg/m3	Inhalable fraction and vapor.

	Тур		Va	
Proprietary Additive	TW	4	10	mg/m3
US. Workplace Environm	ental Exposure Level	(WEEL) Guides		
Components	Тур	e	Va	lue
Proprietary Solvent 1	STE	E	12	0 mg/m3
			30	ppm
	TW	4	60	mg/m3
			15	ppm
Proprietary Solvent 2	TW	4	40	ppm
iological limit values				
ACGIH Biological Exposu		_		
Components	Value	Determinant	Specimen	Sampling Time
Proprietary Solvent 1	100 mg/l	TRADE SECRET	Urine	*
* - For sampling details, ple	ease see the source do	cument.		
xposure guidelines				
US - California OELs: Ski	U			
Proprietary Solvent 1 (US WEEL Guides: Skin d		Can b	be absorbed throu	igh the skin.
Proprietary Solvent 1 (e absorbed throu	•
ppropriate engineering ontrols	applicable, use pro	ocess enclosures, l levels below recom	ocal exhaust vent mended exposur	ates should be matched to conditions. If tilation, or other engineering controls to e limits. If exposure limits have not been level.
dividual protection measure	es, such as personal p	protective equipm	ent	
Eye/face protection	Wear safety glass a full face shield s		s (or goggles). If t	here is a potential for splashing Goggles o
Skin protection				
Hand protection	Wear protective gl mils.	oves. Chemical res	sistant gloves, suo	ch as barrier laminate or butyl rubber ≥14
	THIC:			
Other	Wear suitable prot chemical resistant	closed toe shoes a	are required. If the	nd long pants or coveralls, socks and ere is a possibility of splashing or spillage, I should also be worn.
Other Respiratory protection	Wear suitable prot chemical resistant chemical resistant If engineering cont limits (where appli been established), a respirator with ei (MSHA/NIOSH ap	closed toe shoes a apron or chemical trols do not maintai cable) or to an acc an approved resp ther an organic va proval number pref proval number pref	are required. If the resistant coverall n airborne concel eptable level (in c irator must be wo por-removing cart ix TC-23C), or ca fix TC-14G) is req	ere is a possibility of splashing or spillage,
	Wear suitable prot chemical resistant chemical resistant If engineering cont limits (where appli been established), a respirator with ei (MSHA/NIOSH ap (MSHA/NIOSH ap	closed toe shoes a apron or chemical trols do not maintai cable) or to an acc an approved resp ther an organic va proval number pref proval number pref	are required. If the resistant coverall n airborne concel eptable level (in c irator must be wo por-removing cart ix TC-23C), or ca fix TC-14G) is req	ere is a possibility of splashing or spillage, I should also be worn. Intrations below recommended exposure countries where exposure limits have not rn. For exposures that may exceed the TL ridge with a prefilter approved for pesticide nister approved for pesticides

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Amber
Odor	Light organic.
Odor threshold	Not available.
рН	3.95 (1% dispersion).
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 exp	plosive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.962 @ 23 °C
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	The data presented in this section are typical values and should not be construed as a specification.
Explosive properties	Not explosive.
Kinematic viscosity	47.1 centipoise @ 23 °C
Oxidizing properties	Not oxidizing.
10. Stability and reactivity	,
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point.
Incompatible materials	Strong oxidizing agents. Peroxides. Phenols.
Hazardous decomposition products	No hazardous decomposition products are known.

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	Mild skin irritation.
Information on toxicological eff	ects

Information on toxicological effects

Acute toxicity	Toxic if swallowed. Harmful if inhaled.

Product	Species	Test Results
ABBA ULTRA		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2020 mg/kg
Inhalation		
Mist		
LC50	Rat	> 2.17 mg/l, 4 h
Oral		
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	1		
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	Not a skin sensitizer.		
Germ cell mutagenicity	Not classified.		
Carcinogenicity	Not classifiable as to carcinogenicity to humans.		
IARC Monographs. Overall I	Evaluation of Carcinogenicity		
Not listed.	S Proprietary) 3 Not classifiable as to carcinogenicity to humans. d Substances (29 CFR 1910.1001-1053)		
Not listed.			
Reproductive toxicity	May damage fertility or the unborn child.		
Specific target organ toxicity - single exposure	Not classified.		
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure.		

12. Ecological information

Ecotoxicity	Very toxic t	o aquatic life with long lasting effects.		
Components	Species		Test Results	
Abamectin (CAS 71751-41-2	2)			
Aquatic				
Acute				
Crustacea	LC50	Daphnia	0.47 μg/l, 96 h	
Fish	LC50	Rainbow Trout (oncorhynchus mykiss)	4.3 μg/l, 96 h	
Persistence and degradability	No data is a	available on the degradability of any ingredie	nts in the mixture.	
Bioaccumulative potential	No data av	ailable.		
Mobility in soil	No data av	ailable.		
Other adverse effects		dverse environmental effects (e.g. ozone de ndocrine disruption, global warming potentia		

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 all applicable 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	

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

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
ΙΑΤΑ	
UN number	UN2902
UN proper shipping name	Pesticide, liquid, toxic, n.o.s. (Abamectin)
Transport hazard class(es)	
Class	6.1
Subsidiary risk	-
Packing group	III
Environmental hazards	No.
ERG Code	6L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed with restrictions.
aircraft	
Cargo aircraft only	Allowed with restrictions.
IMDG	and emergency procedures before handling.
UN number	UN2902
UN proper shipping name Transport hazard class(es)	PESTICIDE, LIQUID, TOXIC, N.O.S. (Abamectin), MARINE POLLUTANT
Class	6.1
Subsidiary risk	0.1
Packing group	-
Environmental hazards	111
	Yes
Marine pollutant EmS	F-A. S-A
	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to	Not established.
Annex II of MARPOL 73/78 and	
the IBC Code	
DOT	





IMDG Regulated Marine Pollutant.

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 as a RESTRICTED USE PESTICIDE. 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. Causes moderate eye irritation. Harmful if inhaled or absorbed through skin. Avoid contact with eyes, skin, or clothing.

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)

	bort Notification (40 CFR	· • •	
	1 (CAS Proprietary)	1.0 % Annual	Export Notification required
CERCLA Hazardous Substa	ince List (40 CFR 302.4)		
Not listed.			
SARA 304 Emergency relea	se notification		
Not regulated.			
OSHA Specifically Regulate	d Substances (29 CFR 19	910.1001-1053)	
Not listed.			
Superfund Amendments and Re	authorization Act of 1980	6 (SARA)	
SARA 302 Extremely hazard	dous substance		
Not listed.			
SARA 311/312 Hazardous chemical	Yes		
Classified hazard	Flammable (gases, aero	sols, liquids, or solids	5)
categories	Acute toxicity (any route	of exposure)	
	Reproductive toxicity	:-: t	
	Specific target organ tox	icity (single or repeat	ea exposure)
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
Abamectin		71751-41-2	3.83

Material name: ABBA ULTRA

1713 Version #: 3.0 Revision date: Mar-03-2023 Issue date: Aug-11-2017

SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.	
Proprietary Solvent 1		Proprietary	> 10	
Other federal regulations				
Clean Air Act (CAA) Sec	tion 112 Hazardous Air P	ollutants (HAPs) List		
Not regulated. Clean Air Act (CAA) Sec Not regulated.	tion 112(r) Accidental Re	lease Prevention (40 C	FR 68.130)	
Safe Drinking Water Act (SDWA)	Contains component	(s) regulated under the S	Safe Drinking Water Act.	
US state regulations				
California Proposition 6	5			
	California to cause cance	r, and Abamectin, which	ng Acetaldehyde, which are are known to the State of C e information go to www.P65	alifornia to cause
International Inventories				
Country(s) or region	Inventory name			On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) 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 date	Aug-11-2017
Revision date	Mar-03-2023
Version #	3.0
HMIS® ratings	Health: 2* Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 2 Instability: 0
Disclaimer	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.
	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. ©2023 AMVAC Chemical Corporation. AMVAC and the AMVAC logo are trademarks owned by AMVAC Chemical Corporation. All rights reserved.
	ABBA is a trademark of Adama that is being transferred to AMVAC Chemical Corporation.
	ACGIH is a trademark of the American Conference of Governmental Industrial Hygienists. CHEMTREC is a trademark of the American Chemistry Council, Inc. HMIS is a trademark of the American Coatings Association. NFPA is a trademark of the National Fire Protection Association, Inc.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.