



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>AMAZIN PLUS 1.2% ME</b>
<b>Other means of identification</b>	
<b>SDS number</b>	353
<b>Product registration number</b>	5481-559
<b>Synonyms</b>	AZA 1.2% CF * ECOZIN PLUS 1.2% ME * ORNAZIN PLUS 1.2% ME
<b>Recommended use</b>	Botanical Insecticide, Repellant, Insect Growth Regulator and Nematicide.
<b>Recommended restrictions</b>	Keep out of the Reach of Children!
<b>EPA Registration number</b>	EPA: 5481-559

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

<b>Company name</b>	AMVAC Chemical Corporation		
<b>Address</b>	4685 MacArthur Court Suite 1200 Newport Beach, CA 92660		
<b>Telephone</b>	AMVAC Chemical Corp	949-260-1200	
	AMVAC Chemical Corp	949-260-6270(FAX)	
<b>Website</b>	www.Amvac-Chemical.com		
<b>E-mail</b>	CustServ@Amvac-Chemical.com		
<b>Emergency phone number</b>	Medical	888-681-4261	
	CHEMTREC® (USA+Canada)	800-424-9300	
	Product Use	888-462-6822	
	CHEMTREC® (Outside USA)	+1-703-527-3887	

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Acute toxicity, inhalation	Category 4
	Sensitization, skin	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	

#### Label elements



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Harmful if inhaled. May cause an allergic skin reaction.
<b>Precautionary statement</b>	
<b>Prevention</b>	Avoid breathing mist/vapors/spray. Do not get this material in contact with skin. Wear protective gloves. Contaminated work clothing must not be allowed out of the workplace.
<b>Response</b>	If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Call a poison center/doctor if you feel unwell.

<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	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	%
Azadirachtin		11141-17-6	1.2
Proprietary Solvent		Proprietary	40 -70

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Mild skin irritation. May cause an allergic skin reaction. Dermatitis. Rash.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Use water spray to reduce vapors or divert vapor cloud drift.  Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Emulsifies with water. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Clean the area with common powdered household detergent and a stiff brush and just enough water to make a slurry.

**Environmental precautions** Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling** Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 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. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Proprietary Solvent	TWA	10 mg/m3	Aerosol.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Not available.

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

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** 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. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

**Appearance** Clear brown liquid

**Physical state** Liquid.

**Form** Liquid.

**Color** Not available.

**Odor** Slightly pungent odor

**Odor threshold** Not determined

**pH** Not available.

**Melting point/freezing point** Not determined

**Initial boiling point and boiling range** Mixture - boiling point not determined

**Flash point** Not available.

**Evaporation rate** < 1 (Butyl acetate)

**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** < 1 (air)

**Relative density** 1.05 g/cm3

### Solubility(ies)

**Solubility (water)** Emulsifies

**Solubility (solvents)** Soluble in alcohols and low molecular weight ketones

<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	8.76 lb/gal
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIB estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	Not determined
<b>pH in aqueous solution</b>	4.1 as 1% emulsion
<b>Specific gravity</b>	1.05

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	May cause an allergic skin reaction.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** May cause allergic skin reaction. Not known.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
AMAZIN PLUS 1.2% ME		
<b>acute</b>		
<b>dermal</b>		
LD50	rabbit	> 5050 mg/kg Tox Cat IV
<b>oral</b>		
LD50	rat	> 5000 mg/kg Tox Cat IV
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Azadirachtin (CAS 11141-17-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	

**Irritation Corrosion - Skin**

Amazin Plus 1.2% ME

, Tox Cat IV  
Organ: skin  
Severity: Slightly**Serious eye damage/eye irritation**

Direct contact with eyes may cause temporary irritation.

**Irritation Corrosion - Eye**

Amazin Plus 1.2% ME

, Tox Cat III  
Organ: eye  
Severity: Minimally**Respiratory or skin sensitization****Respiratory sensitization**

Not a respiratory sensitizer.

**Skin sensitization**

May cause an allergic skin reaction.

**Skin sensitization**

Amazin Plus 1.2% ME

, LLNA  
Result: Sensitizer  
Organ: skin**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**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**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**

Not classified.

**Specific target organ toxicity - repeated exposure**

Not classified.

**Aspiration hazard**

Not an aspiration hazard.

**Chronic effects**

Prolonged inhalation may be harmful.

**12. Ecological information****Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Components****Species****Test Results**

Azadirachtin (CAS 11141-17-6)

**Aquatic**

Fish

LC50

Chinook salmon (*Oncorhynchus tshawytscha*)

4 mg/l, 96 hours

**Persistence and degradability**

No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential****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. 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**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**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.

CAUTION! Causes moderate eye irritation. Harmful if inhaled or absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes or on clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. 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. Runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

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

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**Classified hazard categories** Acute toxicity (any route of exposure)  
Respiratory or skin sensitization

**SARA 313 (TRI reporting)**

Not regulated.

## 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 (SDWA)** Not regulated.

## US state regulations

### California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## 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** Apr-24-2015

**Revision date** Aug-20-2018

**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
- IARC: International Agency for Research on Cancer
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Agency
- SARA: Superfund Amendments and Reauthorization Act
- TSCA: Toxic Substances Control Act
- DOT: Department of Transportation
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transport Association

**Version #** 3.0

**HMIS® ratings**

- Health: 1
- Flammability: 0
- Physical hazard: 0

**NFPA ratings**

- Health: 1
- Flammability: 0
- Instability: 0

**Disclaimer**

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.

**Revision information**

Hazard(s) identification: Prevention

Hazard(s) identification: Response

Hazard(s) identification: Hazard(s) not otherwise classified (HNOC)

Hazard(s) identification: Supplemental information

Accidental release measures: Personal precautions, protective equipment and emergency procedures

Handling and storage: Precautions

Handling and storage: Safe handling advice (and precautions)

Other information, including date of preparation or last revision: Disclaimer

GHS: Classification