



MATERIAL SAFETY DATA SHEET

Product: **AZA-DirectTM**

Formulator: Gowan Company
P.O. Box 5569
Yuma, Arizona 85366-5569
(520)783-8844

Emergency Phone: (520) 783-3803
For 24-Hour Emergency Assistance (Spill, Leak, Fire, or Exposure), Call CHEMTREC[®]:

Inside the U.S.: (800) 424-9300
Outside the U.S.: (703) 527-3887
(800) 225-5635 ext. 283

For MEDICAL Emergency:

1. CHEMICAL IDENTIFICATION

Product: AZA-Direct
EPA Signal Word: CAUTION
Active Ingredient: Azadirachtin 1.2(%)
Chemical Name: Azadirachtin
Chemical Class: Biological Insecticide

EPA Registration No.: 71908-1-10163
CAS No.: 11141-17-6

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	OSHA – PEL	ACGIH – TLV	OTHER	NTP/IARC/OSHA CARCINOGEN
Active Ingredient 1.2(%)	N/A	N/A	N/A	N/A
Other Ingredients 98.8(%)	N/A	N/A	N/A	N/A

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a brown viscous liquid intended for use as a pesticide to control insects on agricultural crops. This product should pose no health concerns through normal use in accordance with label directions.

Physical Properties

Appearance: Brown viscous liquid

Odor: Mild odor

Symptoms of Acute Exposure: None known

Primary Routes of Exposure: Inhalation, ingestion, eyes, and skin.

Medical Conditions Likely to be Aggravated by Exposure: None known

Hazardous Decomposition Products: None known.

Unusual Fire, Explosion, and Reactivity Hazards: None known

4. FIRST AID MEASURES

Ingestion: May cause drowsiness

Inhalation: May be irritating to mucous membrane and excessive exposure may result in drowsiness

Eye Contact: May cause mild irritation

Skin Contact: May cause mild irritation

!! IN ALL CASES OF SUSPECTED POISONING, GET MEDICAL ATTENTION IMMEDIATELY !!

For emergency **MEDICAL** response and hazard communication **ONLY**, call:

Hazard Information Services at (800) 228-5635 ext. 283.

5. FIRE FIGHTING MEASURES

Flashpoint (test method): >200°F
Flammable Limits (% in air): N/A
Autoignition Temperature: N/A
Flammability: N/A
Appropriate Extinguishing Media: N/A
Fire Fighting Guidance: Will support combustion
Unusual Fire, Explosion, and Reactivity Hazards: N/A

6. ACCIDENTAL RELEASE MEASURES

In Case of Spills or Leaks

Flush the area with water. Do not allow water to contaminate surrounding area. Personnel in operation may wear protective clothing.

7. HANDLING AND STORAGE

Precautions in Handling: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Storage: Do not contaminate water, food, or feed by storage or disposal. Do not reuse container. Do not store this product above 105°F or below 32°F for extended periods of time. Keep in tightly closed and original containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Harmful if absorbed through skin or inhaled. Avoid breathing vapor. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse.

Manufacturing and Packaging Employees

Eye/Face	Wear chemical safety goggles.
Skin Protection	Wear protective gloves.
Respiratory Protection	Thorough ventilation is recommended in case of accidental spillage.
Additional Protection Information	Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
Applicators/Handlers	Must wear long-sleeved shirt and long pants, waterproof gloves, and shoes plus socks.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown viscous liquid
Melting Point: >160°C for technical grade product
Boiling Point: N/A
Specific Gravity/Density: 0.98

Solubility in H₂O

Active Ingredient – Emulsifies with water

Vapor Pressure

Active Ingredient – 3.6×10^{-11} (hpa) for Azadirachtin A

10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous Polymerization: Will not occur
Decomposition Products: None known

10. STABILITY AND REACTIVITY (continued)

Hazardous

Mixtures: None known

Conditions

To Avoid: None known

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Oral: Rat LD₅₀ >5g/kg
Dermal: Rat LD₅₀ >2g/kg
Inhalation: Rat LC₅₀ >5.4 mg/L
Primary Eye Irritation: Rabbit >No irritation
Primary Skin Irritation: Rabbit >Mild
Skin Sensitization: Guinea Pig >No sensitization

Mutagenic Potential

Non mutagenic

Reproductive Hazard Potential

NOAEL 5000 mg/kg

Chronic/Subchronic Toxicity Studies

Carcinogenic Potential Non carcinogenic

Other Toxicity Information Unknown

12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal:

Metal – Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

Plastic – Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

Glass – Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved State and local procedures.

Hazardous Information: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse container.

14. TRANSPORT INFORMATION

DOT Classification

Not regulated if shipped by land only.

International Maritime Organization

Environmentally Hazardous Substance, Liquid, N.O.S. (contains Azadirachtin 1.2%), UN 3082, Class 9, PG III, Marine Pollutant

International Civil Aviation Organization

Environmentally Hazardous Substance, Liquid, N.O.S. (contains Azadirachtin 1.2%), UN 3082, Class 9, PG III, Marine Pollutant

15. REGULATORY INFORMATION

SARA Title III Classification

Section 302/304: N/A

Section 311/312: N/A

Section 313 chemical(s): N/A

Proposition 65

Not Applicable

CERCLA Reportable Quantity (RQ)

Not Applicable

RCRA Classification

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA Status

Not Applicable

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 1

Flammability: 1

Reactivity: 0

0	Least
1	Slight
2	Moderate
3	High
4	Severe

Prepared By:

Gowan Company
(520) 783-8844

Notice: The information and recommendations contained herein are provided in good faith and are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information herein.

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