

AzaPure (AZADIRACTIN TECHNICAL)

SECTION I
RESEARCH INSTITUTE
Vittal Mallya Scientific Research Foundation
#94/3 & 94/5, 23rd Cross, 29th Main, BTM II Stage,
BANGALORE – 560 076
Tel: 91-080-26687223, 26687183
Fax: 91-080-26687170

SECTION II
HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	%	CAS No.	OSHA/PEL	ACGIH/TLV	Other limits recommended
Azadirachtin A Azadirachtin B	40- 45%	11141-17-6 95507-03-2	None known	None known	None known
Azadirachtin F Azadirachtin H Azadirachtin I Salannin Nimbin & fatty acids etc.		118855-02-0 134788-15-1 134788-16-2 992-20-1 5945-86-8	Not known	Not known	Not known
Other compounds of Neem origin in the extract	55- 60%	Not known	Not known	Not known	Not known

SECTION III
PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance	Brownish free flowing powder
Odour	Characteristic neem odour (similar to Garlic)
Solubility in water	0.25 g/l at 25°C
Specific tap density	0.17 g/ml at 25°C
Molecular Weight	720 (Azadirachtin A) 662 (Azadirachtin B)
Empirical Formula	C35 H44 O16 (Azadirachtin A) C33 H42 O14 (Azadirachtin B)
pH	4.5 at 25°C
Corrosion Characteristics	Non corrosive to packing materials
Storage	20-25°C

SECTION IV
FIRE AND EXPLOSION DATA

Flammable Limits	Not known
Extinguishing Media	Polymer foam or carbon dioxide
Special Fire Fighting Procedures	Wear protective clothing and face shields
Unusual fire and explosion hazards	No hazard

SECTION V
REACTIVITY DATA

Stability	Stable for use and storage at normal conditions
Conditions to avoid	Degrade fast when exposed to high temperature or light
Materials to Avoid	Acids, alkali or oxidizing agents
Hazardous Decomposition	No hazardous materials are produced
Hazardous polymerization	Not reported

SECTION VI
HEALTH HAZARD DATA

Mode of Entry: Inhalation - yes
 Skin - yes
 Ingestion- yes

Health Hazards:

Acute Toxicity	Acute oral Rat LD ₅₀ >5 g/kg
	Acute Dermal Rat LD ₅₀ >2g/kg
	Acute Inhalation Rat LC ₅₀ >0.72 mg/L
	Skin Irritation - Rabbit > No Irritation
	Skin Sensitization-Guinea Pig-Sensitisation
Chronic Toxicity	Eye Irritation-Rabbit-Positive
	Developmental toxicity-NOAEL-50 mg/kg
	Subchronic feeding>3200 mg/kg
	Bacterial Mutation Assay - Non mutagenic
	Mammalian cell Gene - Negative
	Mutation Assay - Negative
Carcinogenicity-Non carcinogenic	

SECTION VII
SIGN AND SYMPTOMS OF EXPOSURE

Exposure types	Symptoms	Emergency and First Aid Procedure
Inhalation	Slight irritation to mucous membrane and eyes possible	Provide fresh air
Ingestion	May cause drowsiness	Induce vomiting, call physician immediately
Skin Contact	No irritation	Wash skin with soap
Eye Contact	May cause irritation	Wash eyes with excessive water.
Chronic Exposure	Continuous exposure effect not known	Continuous exposure may cause implications

SECTION VIII ECOLOGICAL SAFETY

Ready to use formulation (1%) developed from Azadirachtin Technical have exhibited high degree of eco-safety as below:

1.	Effect on Honey Bees	No Risk
2.	Effect on Earthworm (LC₅₀)	safe
3.	Effect on predators	Harmless
4.	Hazard to soil Microflora	Non Hazardous
5.	Acute toxicity to fish-Rainbow Trout (LC₅₀)	Very High
6.	Algal Inhibition Test	No inhibition
7.	Metabolism in soil	Quick decomposition in soil
8.	Degradability in water	Readily Biodegradable in water

SECTION IX PRECAUTIONS FOR SAFE HANDLING AND USE

Precautions in case of accidental spillover and release

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

Waste Disposal

Do not contaminate water, food, or feed by storage or disposal. Dispose of containers in an approved disposal facility. Ensure compliance with local, state and federal regulations.

Precautions for handling and storage

Keep in a cool and dry place. Avoid direct sunlight. Open dumping is prohibited. Dispose containers in an approved waste facility.

OTHER PRECAUTIONS

Shipping Name	AzaPure - Neem Seed Kernel Extract
Shipping Containers Markings	AzaPure - Neem Seed Kernel Extract

Shipping Container Labels	AzaPure - Neem Seed Kernel Extract
Special Instructions	No special instruction on handling required
Flammability	Non flammable
Transport by Air	Safe for Air Transport

SECTION IX SPECIAL PROTECTION

Respiratory Protection	Use spraying clothings to avoid spray mist
Protective Gloves	Wear protective gloves
Eye protection	Wear safety goggles
Work Practices	Practice good personnel hygiene. Wash hands after usage of the product

SECTION X REGULATORY INFORMATION

Designation	TSAC (Toxic substance control Act) Not regulated CERCLA (Comprehensive Emergency Response Compensation and Liability Act) Not listed SARA TITLE III (Superfund Amendments and Reauthorisation Act) 311/312 Hazard Categories: Not regulated 313 Reportable Ingredients: None listed
	Eco-friendly Neem Based Pesticide of Plant Origin
	Non Hazardous Material

SECTION XI ORIGIN OF INFORMATION*

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*The technology developed with the support of DBT, Govt. of India