

MATERIAL SAFETY DATA SHEET**AZADIRACHTIN 5% WSC (NEEM BASED INSECTICIDE)****SECTION I****MANUFACTURER INFORMATION**

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SECTION II**HAZARDOUS INGREDIENTS/IDENTIFY INFORMATION**

Hazardous Components	%	CAS No.	OSHA/PEL	ACGIH/TLV	OTHER LIMITS RECOMMENDED
Azadirachtin A Azadirachtin B	5.0	11141-17-6 95507-03-2	None known	None known	None known
Other neem compounds Azadirachtin F Azadirachtin H Azadirachtin I Salannin, Nimbin and fatty acids	15.0	118855-02-0 134788-15-1 134788-16-2 992-20-1 5945-86-8	Not known	Not known	Not known
Other proprietary mixture and formulation compounds	80.0	Not known	Not known	Not known	Not known

SECTION III**PHYSICAL/CHEMICAL CHARACTERISTICS**

Appearance : Brown viscous liquid
 Odour : Characteristic neem odour
 Solubility in water : Fully Soluble
 Specific Gravity : 1.06
 Active Ingredients : Azadirachtin A
 Azadirachtin B
 Molecular Weight : 720 (Azadirachtin A)
 662 (Azadirachtin B)

Empirical Formula	: C ₃₅ H ₄₄ O ₁₆ (Azadirachtin A)
	: C ₃₃ H ₄₂ O ₁₄ (Azadirachtin B)
Acidity	: < 0.24%
pH	: 6.5 ± 0.02
Corrosion Characteristics	: Non corrosive to HDPE containers
Storage Conditions	: Ambient conditions

SECTION IV

FIRE AND EXPLOSION DATA

Flash Point	: > 100 deg C - No Fire Hazard
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 at ordinary conditions of use and storage
Conditions to avoid	: High temperature or sunlight or light quickly degrade the material
Materials to Avoid	: Acids, alkali or oxidizing agents.
Hazardous Decomposition	: No hazardous materials are produced
Hazardous polymerization	: Not occur

SECTION VI

HEALTH HAZARD DATA

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

Health Hazards:

Acute Toxicity

Acute oral - Rat LD ₅₀	: >765.8 mg//kg
Acute Oral-mice LD ₅₀	: >1570.4 mg/kg
Primary skin Irritation-Rabbit	: Non irritant
Irritation to Mucous Membrane	: Rabbit-Mild Irritant
Acute Dermal-Rabbit LD ₅₀	: >5g/kg

Chronic Toxicity

Mutation Assay	: Non Mutagenic
Neurotoxicity	: No Neurotoxicity
Reproductive Toxicity	: NOAEL 5000 mg/kg
Carcinogenicity	: Non Carcinogenic
Effect on spray operators	: No adverse effects

SIGN AND SYMPTOMS OF EXPOSURE

Inhalation	: May be irritating to mucous membrane and excessive exposure may result in drowsiness
Ingestion	: May cause drowsiness
Skin Contact	: May cause mild irritation
Eye Contact	: May cause irritation
Chronic Exposure	: Continuous exposure may cause implications

EMERGENCY AND FIRST AID PROCEDURE

Inhalation	: Remove to fresh air
Ingestion	: Induce vomiting by gastric lavage, call physician immediately
Skin Contact	: Wash skin with soap
Eye Contact	: Wash eyes with excessive water. Get medical attention if required

SECTION VII**ECOLOGICAL SAFETY**

Azadirachtin-F has shown good safety to various beneficials including Honey bees, Earthworm, Predators and parasites.

SECTION VIII**PRECAUTIONS FOR SAFE HANDLING AND USE****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

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

WASTE DISPOSAL METHOD

Do not contaminate water, food, or feed by storage or disposal. Disposal 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 : Neem Based Insecticide
Shipping Containers Markings : Neem Based Insecticide
Shipping Container Labels : Neem Based Insecticide
Special Instructions : No special instruction on handling required
Flammability : Non flammable
Transport by Air : Safe for Air Transport

SECTION IX

CONTROL MEASURES

Respiratory Protection : Use spraying clothings to avoid spray mist direct contact
Protective Gloves : Wear protective gloves
Eye protection : Wear safety goggles
Ventilation : Thorough ventilation is recommended in case of accidental spillage
Work Practices : Observe good personnel hygiene. Wash hands after usage of the product

SECTION X

Regulatory Information

Designation : Eco-friendly Neem Based Pesticide of Plant Origin
: Non Hazardous Material

SECTION XI

Information Origin

E.I.D Parry (India) Limited.
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