

**Neemazal T/S 1.2 % EC  
(AZADIRACHTIN BASED)**

**1. Identification**

Description	Azadirachtin-A	Azadirachtin-B
CAS No.	11141-17-6	95507-03-2
Manufacturer	COROMANDEL INTERNATIONAL LIMITED Thyagavalli Village, Cuddalore-608 801, Tamil Nadu, India	
Regd. Office	Coromandel International Limited Coromandel House, Sardar Patel Road Secunderabad 500003, Telangana, India	
Emergency Contact details	+91 4147 770201/207	

**2. Hazard(s) identification**

HAZARDOUS COMPONENT	CAS No.	OSHA/PEL	ACGIH/TLV	OTHER LIMITS RECOMMENDED
Azadirachtin A & Azadirachtin B	11141-17-6 95507-03-2	Not known	Not known	Not known
Other neem compounds, Aza-F Aza-H, Aza-1 Salannin, Nimbin and 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 proprietary mixture and formulation compounds.	Not known	Not known	Not known	Not known

For Coromandel International Limited,

Authorised Signatory  
(Dr. C. Suresh Kumar)



### 3. Composition/information on ingredients

COMPONENTS	PERCENTAGE COMPOSITION
Azadirachtin (a.i)	1.2% w/w
Other limonoids Nimbin, salanin, fatty acids, glycerol esters, etc	3.5-4.0% w/w
Surfactant	q.s to make
<b>Total</b>	<b>100.00%</b>

### 4. First Aid measures

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

### 5. Fire-fighting measures

Flash point	:	>171°C-No Fire Explosion Hazard
Flammability	:	<b>Non Flammable</b>
Extinguishing media	:	Polymer foam or carbon dioxide
Special Firefighting procedures	:	Wear protective clothing and face shields
Unusual fire and explosion hazards	:	No hazard

### 6. Accidental release measures

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

### 7. Handling and storage

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

### 8. Exposure controls/ personal protection

Respiratory protection	:	Use spraying clothing's to avoid spray mist direct contact
Protective Gloves	:	Wear protective gloves
Eye protection	:	Wear chemical 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



**9. Physical and chemical properties**

Appearance	:	Brown viscous liquid
Odour	:	Characteristic neem fragrant odour
Solubility in water	:	Emulsifies with water
Specific gravity	:	0.9800
Vapour pressure	:	$3.6 \times 10^{-11}$ (hpa)
Molecular weight	:	720-Azadirachtin-A 662-Azadirachtin-B
Active Ingredients	:	Azadirachtin-A Azadirachtin-B
Empirical formula	:	$C_{35} H_{44} O_{16}$ -Azadirachtin-A $C_{33} H_{42} O_{14}$ -Azadirachtin-B
Acidity	:	<0.50 %
pH	:	7±1
Corrosion characteristics	:	Non corrosive to HDPE containers
Boiling point	:	Not Established
Viscosity	:	281.4 mm <sup>2</sup> /s at 20°C 96.95 mm <sup>2</sup> /s at 40°C
Explosibility	:	Non explosive

**10. Stability and reactivity**

Stability	:	Stable at ordinary conditions of use and storage
Conditions to avoid	:	High temperature, sunlight or illuminated places degrade the material)
Materials to avoid	:	Acids, alkalis and oxidizing agents
Dangers of Product decomposition	:	None
Hazardous Decomposition	:	No hazardous material are produced
Hazardous polymerisation	:	Not occur



**11. Toxicological information**

Mode of entry	:	Inhalation-Yes Skin-Yes Ingestion-Yes
Acute toxicity (Based on Neemazal 1.2 %EC Data)	:	Acute Oral-Rat LD <sub>50</sub> : >5000 mg/Kg (liquid) Acute Dermal-Rat LD <sub>50</sub> : >2000 mg/Kg Acute inhalation Rat: >5400 mg/L of Air Skin irritation Rabbit: Mild Irritant (All reactions cleared by 7 days) Eye Irritation-Rabbit- Mild Irritant (All irritations cleared by 2 days) Skin sensitization-Guinea pig-No sensitization
Acute & chronic toxicity of technical active Ingredient	:	Acute Oral-Rat LD <sub>50</sub> : >5000 mg/Kg Acute Dermal-Rat LD <sub>50</sub> : 2000 mg/Kg Acute Inhalation-Rat-LC <sub>50</sub> -0.1 mg/L of Air Skin Irritation-Rabbit-Slight irritation Eye Irritation-Slight irritation Mutagenicity-Non mutagenic Carcinogenicity-Non carcinogenic Neurotoxicity-No neurotoxicity: NOAEC: 1000 mg/kg Developmental Toxicity-Rats: NOAEC: 50 mg/Kg/Day Dietary toxicity-Rats : NOAEC: 100 ppm

**12. Ecological information**

Effect on honey bees	:	Harmless
Effect on earthworm	:	LD <sub>50</sub> : >1000 mg/Kg)
Effect on predators	:	Harmless
Hazard to soil microflora	:	Non hazardous
Metabolism in soil	:	Rapid decomposition in soil
Acute daphnia immobilization	:	EC <sub>50</sub> :>1000 mg/L.
Algal inhibition test	:	Non inhibitory, Non-stimulant
Acute fish toxicity (rainbow trout)	:	LC <sub>50</sub> : 440 mg/L. (24 hrs)
Degradability in water	:	Readily biodegradable in water

**13. Disposal consideration**

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.

**14. Transport information**

Shipping name	:	NEEMAZAL T/S 1.2% EC
Shipping containers markings	:	NEEMAZAL T/S 1.2% EC
Shipping container labels	:	NEEMAZAL T/S 1.2% EC
Special instruction	:	No special instruction on handling required
Flammability	:	Non flammable
Transport by air	:	Safe for all kind of transport



**15. Regulatory information**

Designation	:	Eco-friendly neem based pesticide of plant origin Non-hazardous material
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**16. Other information****Information Origin**

COROMANDEL INTERNATIONAL LIMITED  
Thyagavalli Village,  
Cuddalore – 608 801,  
Tamil Nadu, India.

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For Coromandel International Limited,

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(Dr. C. Suresh Kumar)

