

1: IDENTIFICATION

Chemical Name	(4'R)-5-O-demethyl-4"-deoxy-4"-(methyl amino) avermectin A1a + (4'R)-5-O-demethyl-25-de (1-methylpropyl)-4"-deoxy-4"-(methyl amino)-25-(1-methylethyl):avermectin A1a (9:1); 4"-(methyl amino) avermectin B1		
Synonyms	Emamectin Benzoate 5% SG	Trade Name AGGRESSOR®	
Uses	Insecticide	Molecular Formula C ₅₆ H ₈₁ NO ₁₅ (B1a); C ₅₅ H ₇₉ NO ₁₅ (B1b)	
Manufacturer/ Supplier	Ulink AgriTech Pvt. Ltd. Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra		
Emergency Contact	9503095030	E-mail	info@agrostar.in

2: COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Emamectin Benzoate	155569-91-8	5.0%
Other ingredients	-	95.0%

3: HAZARD IDENTIFICATION

Physical/Chemical Hazard:	May decompose at high temperature forming toxic gases.	
Health Hazard:	H319 Causes severe eye irritation	H315 Irritating to skin
	H 335 Inhalation may cause respiratory irritation	H336 May cause drowsiness and dizziness.
Environmental Hazard:	H400 Very toxic to aquatic organisms;	H410 Cause long term adverse effects in aquatic environment

4: FIRST AID MEASURES

General: Remove patient from polluted area. Place in the recovery position. Remove contaminated clothing and dispose them in a safe manner.

Inhalation: Move patient to fresh air. Keep the victim warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Immediately get medical attention.

Ingestion: Rinse mouth with plenty of water. Do not give anything liquid to the person. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention immediately and show this container or label.

Skin Contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a doctor.

Eye Contact: Rinse immediately with plenty of water. After 5 minutes remove contact lenses if present. Rinse again with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. Seek medical attention if irritation develops.

Note to Physician: This material believed to enhance GABA activity in animals. It is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patient with potentially toxic mectin exposure. Toxicity can be minimized by early administration of chemical absorbents (activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures as indicated by clinical signs, symptoms and measurements.

5: FIRE FIGHTING MEASURES

Extinguishing Media: water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media: Solid water stream as it may scatter and spread fire.

Specific Hazards: Fire will produce dense black smoke containing hazardous products of combustion as the product contains combustible organic components. Exposure to decomposition products may be a hazard to health

Special Procedures: Do not discharge extinguishing water into the environment. Move containers away from area if it can be done without risk. If possible remove containers from fire zone, cool them with water spray. Cool closed containers exposed to fire with water spray.

Protection of Fire Fighters: Do not breathe a fumes, Wear fire/ flame resistant/retardant clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with spilled products or contaminated surfaces. Do not eat, drink or smoke. Avoid dust formation

Environmental Precaution: Prevent entry to sewers and public waters. Notify the authorities if product enters sewers or public waters.

Methods for Cleaning-up: Clean up spills immediately by with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations. After removal, clean contaminated floors and objects thoroughly with water and detergents. Dispose of in accordance with local regulations. Wear suitable protective equipment while cleaning.

7: HANDLING & STORAGE

Handling: No special protective measures against fire required.. Do not smoke, drink, or eat during handling. Wash hands and other exposed areas with mild soap and water before and after handling material. Wear protective equipments to avoid contact and/or inhalation with the product. Wash clothing and equipment before reuse. Good personal hygiene procedures must be practiced.

Specific Conditions: Good local exhaust ventilation.

Storage: Store in dry, cool, well-ventilated area. Keep in original container and tightly closed when not in use. Keep product away from children, seeds, fertilizer, foods and animal feeds.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Minimize airborne concentration. If air borne dust is generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below relevant exposure limit.

General Protection: Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

Personal Protection: Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

Respiratory Protection: Always use NIOSH/MSHA approved respiratory protection equipment with a universal filter type including particle filter. Use a self-contaminated breathing equipment in case of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

Skin Protection: Wear suitable protective clothing, including long sleeved shirt, long pants, gloves, coveralls, and boots to avoid skin contact.

Hand Protection: Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton.

Eye Protection: Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eyewash should be easily available.

Others: Wash clothing before reusing.

9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Granules

Flammability (Solid, gas): Not highly flammable

Physical State: Solid

Colour: White to tan

Oxidizing Properties: Not oxidizing

Explosive Properties: Not Explosive

pH: 5 - 8(1% aq. sol.)

Solubility: Not miscible

10: STABILITY & REACTIVITY

Stability: Stable under normal circumstances.

Hazardous Polymerization: Not known to occur.

Materials to avoid: Not known.

Conditions to avoid: No data available

Hazardous decomposition: Combustion or thermal decomposition will evolve toxic and irritant vapors.

11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : 1516

Rat inhalation LC50 [mg/l/4h] : > 6.28

Skin Irritation (rabbit): Non irritant

Dermal (rat) LD50 [mg/kg]: >2000

Skin irritation (rabbit): Non irritant.

Eye irritation (rabbit): Non irritant.

12: ECOLOGICAL INFORMATION

Ecotoxicity

Crap fish LC50 (96 hrs) [mg/L] : 6.8

Daphnia EC50 (48 hrs) [mg/L]: 0.08

Green algae EC50 (72 hrs)[mg/L]: 28.4

Bio-accumulation Potential: Does not bioaccumulate.

Persistence, Degradability and Mobility in Soil:

Not persistent in water and soil. Immobile in soil

13: DISPOSAL CONSIDERATION

Waste-disposal Procedures: Dispose of this product only according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated Packaging: Contaminated packaging should be emptied and rinse thrice. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty container.

14: TRANSPORT INFORMATION

UN No. 3077

Proper Shipping Name: Environmentally hazardous substance solid, N.O. S

Land Transport (ADR/RID): Class-9, Packing Group-III,

Sea Transport (IMO/IMDG): Class-9, Packing group-III, Marine Pollutant-Yes

Air Transport (IATA/ICAO): Class-9 Packing group-III, Environmental hazard mark-Yes

15: REGULATORY INFORMATION

Hazard Symbol: Dangerous for the environment (N); Xn Harmful

International WHO Toxicity: Classification II Moderately hazardous

Phrases R: R22, R 23/25, R 36, R48/22, R50/53, R68/20/21/22

Phrases S: S 2, S 13, S 20/21, S 35, S 36/37, S 57

16: OTHER INFORMATION

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