

MEGALAIM



VEYONG

Material Safety Data Sheet

HEBEI VEYONG BIO-CHEMICAL CO., LTD.

MSDS FOR EMAMECTIN BENZOATE 5% SG

1. PRODUCT IDENTIFICATION

Product Name: Emamectin Benzoate 5%SG **MFG No.:**
Active Ingredient: Emamectin Benzoate **CAS No.:** 155569-91-8
Chemical Name: A mixture of Emamectin Benzoate B1a and Emamectin Benzoate B1b
Chemical Class: Botanical

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Composition	Emamectin Benzoate	Anhydrous lactose	Dispersing agent	Other
Content, %	5	70	7	18

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

Harmful if inhaled or swallowed. Causes severe eye irritation. Injury may be permanent. May cause skin irritation. Inhalation can cause irritation to the respiratory tract and can result in chemical pneumonitis if aspirated. Ingestion results in central nervous system effects such as muscle tremors, decreased activity, ataxia (unsteadiness or incoordination), and dilated pupils (mydriasis). Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases.

Physical Properties

Appearance: White powder with a tendency to clump
Odor: Weakly aromatic odour

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Combustible solid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy flow along surfaces to distant ignition sources and flash back.

4. FIRST AID MEASURES

- Ingestion:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
- Eye Contact:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Skin Contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Inhalation:** Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Notes to Physician

Probable mucosal damage may contraindicate the use of gastric lavage. Early signs of intoxication include dilation of pupils, muscular incoordination and muscular tremors. If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms and measurements. In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since emamectin benzoate is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic emamectin benzoate exposure.

5. FIRE FIGHTING MEASURES

Fire and Explosion

- Flash Point(Test Method):** Not applicable
- Flammable Limits(% in Air):** Lower: Not applicable Upper: Not applicable
- Autoignition Temperature:** Upper: Not applicable
- Flammability:** No flammability

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Combustible solid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Heavy vapors can flow along surfaces to distant ignition sources and flash back..

In Case of Fire

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions in Protective Equipment Section. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

- Ingestion:** Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.
- Eye Contact:** Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
- Skin Contact:** Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
- Inhalation:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapor cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Emamectin benzoate

- Appearance:** White powder with a tendency to clump
- Odour:** Weakly aromatic odour
- Density** 1.15 at 21.0°C±0.5°C
- pH value** 5.86 at 25°C
- Persistent foam** ≤60
(1min later) mL

10. STABILITY AND REACTIVITY

- Stability:** Stable under normal use and storage conditions.
- Hazardous Polymerization:** Will not occur.
- Conditions to Avoid:** Heat; light.
- Materials to Avoid:** Strong oxidizers.
- Hazardous Decomposition Products:** Can decompose at high temperatures forming toxic gases.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

- Oral** The acute oral median lethal dose (LD₅₀) and 95% confidence limits of the test material in

	the female Wistar strain rat were calculated to be 550 (550-2000) mg/kg bodyweight (based on an assumed sigma of 0.5).
Demarl	The acute dermal median lethal dose (LD ₅₀) of the test material in the Wistar strain rat was found to be greater than 2000 mg/kg bodyweight.
Inhalation	The acute inhalation median lethal concentration (4 hr LC ₅₀) of Emamectin Benzoate 5% SG, in the HsdHan™: WIST strain rat, was greater than 5.10 mg/L
Skin irritation	The test material produced a primary irritation index of 2.3 and was classified as a moderate irritant to rabbit skin according to the Draize classification scheme.
Eyes irritation	The test item produced a maximum group mean score of 10.0 and was classified as a mild irritant (Class 4 on a 1 to 8 scale) to the rabbit eye according to a modified Kay and Calandra classification system.
Skin sensitization	The test material was considered to be a non-sensitiser under the conditions of the test.

12. ECOLOGICAL INFORMATION

Summary of Effects

Emamectin benzoate: Very toxic to aquatic organisms. Toxic to bees. May cause long-term adverse effects in the environment.

Eco-Acute Toxicity

Emamectin benzoate: Bees LC₅₀/EC₅₀ 0.0036µg/bee
 Invertebrates (Water Flea) LC₅₀/EC₅₀ 0.0099ppm
 Fish (Trout) LC₅₀/EC₅₀ 0.174 ppm
 Fish (Bluegill) LC₅₀/EC₅₀ 0.18 ppm
 Birds (8-day dietary - Bobwhite Quail) LC₅₀/EC₅₀ 1318 ppm
 Birds (8-day dietary - Mallard Duck) LC₅₀/EC₅₀ 570 ppm

Environmental Fate

Emamectin benzoate: No data available for the formulation. The information presented here is for the active ingredient, emamectin benzoate.

13. DISPOSAL CONSIDERATIONS

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Characteristic Waste: Not Applicable

Listed Waste: Not Applicable

14. TRANSPORT INFORMATION

DOT Classification

Proper Shipping Name: Pesticides, solid, Emamectin Benzoate 5%SG, Marine Pollutant

Hazard Class or Division: Division 9

Identification Number: UN3077

Packing Group: PG III

B/L Freight Classification

Insecticides, N.O.I. O/T poison

15. REGULATORY INFORMATION

OSHA Status: not listed

TSCA Status: not listed

16. OTHER INFORMATION

Manufacture information:

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The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.