

MATERIAL SAFETY DATA SHEET

Abamectin 1.8 % EC, 2011, Issued by: Golsam Gorgan Chemicals

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY:

Product Name: Abamectin 1.8 % EC

Company Name: Golsam Gorgan Chemicals

Company Address: No. 72, Africa avenue, Tehran, Iran

Phone: 021 85597

Product Type: Insecticide

Product Use: Insecticide, acaricide and nematocidal with contact and stomach action. Control of insect pests in cabbage, citrus, vegetables.

Other Information: This MSDS describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of them diluted product are likely to be much less severe.

2. HAZARDS IDENTIFICATION:

Emergency Overview:

Appearance and Odour. Pale yellow to amber colour liquid with slight alcoholic odour

Warning Statements: Keep out of reach of children.

WARNING. Hazards to humans and domestic animals. May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in the eyes. Harmful if inhaled or absorbed through skin. Avoid breathing spray mist. Avoid contact with eyes, skin and clothing.

Potential Health Effects:

Ingestion: Moderately toxic based on toxicity studies

Eye Contact: Moderately irritating based on toxicity studies. Vapour and mist can cause irritation.

Skin Contact: A sensitization (allergic) reaction may occur in some individuals.

Inhalation: Breathing of mists and vapors should be avoided.

Environment Effect: This product is toxic to fish and wild life.

This product is toxic to bees exposed to direct treatment or residues on blooming crops or weeds.

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3. COMPOSITION / INFORMATION ON INGREDIENTS:

Type of Formulation: Emulsifiable Concentrate(EC)

Name Abamectin

CAS; 71751-41-2

Ingredients Proportion: 1.8%, w/w

Inert Ingredients: 98.1%, w/w

4. FIRST AID MEASURES:

Ingestion

Contact the doctor or National Poison Centre immediately. Do not give any liquid to the person. Do NOT induce vomiting unless told to do so by doctor or National Poison Centre. DO not give anything by mouth to an unconscious person.

Eye: Hold eyelids open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call doctor for treatment advice

Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Wash affected area with soap and water. Call doctor for treatment advice.

Inhalation

Remove affected person to fresh air until recovered. If the person is not breathing, call an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.

Call doctor for further treatment advice.

Advice to Doctor

Symptom

Early sign of intoxication include dilation of pupils, muscular incoordination and muscular tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical adsorbents (e.g. activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive clinical signs, symptoms and measurements.

In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin 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 abamectin exposure.

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Treatment

There is no specific antidote if this product ingested. Treat symptomatically. Product contains petroleum distillate—vomiting may cause aspiration pneumonia. Person suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and /or systemic steroids.

5. FIRE FIGHTING MEASURES:

Extinguishing Media Foam, carbon dioxide or dry chemical. Do not use high volume water jet.

Special Fire Fighting Procedures

Fire-fighters should wear NIOSH/MHSA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Hazardous Decomposition

Products May produce oxides of carbon, hydrogen and nitrogen.

6. ACCIDENTAL RELEASE MEASURES:

Spills and Disposal

Clean up small spills immediately, use proper personal protection. Absorb spill with absorbent material such as earth, sand or clay. After removal, flush contaminated area thoroughly with water containing strong detergent. Sweep up and place in a chemical container. Seal the container and handle in an approved manner. Keep spills out of streams and domestic water supplies. Dike to prevent contamination of local water sources. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of waters. Dispose of waste and rinsate in the appropriate manner.

Environmental Precaution

Prevent material from entering public sewer systems or any waterways.

7. HANDLING AND STORAGE:

Handling

Do not get in eyes.

Avoid contact with skin or clothing.

Avoid breathing vapour or spray mist.

Users should wash hands before eating, chewing gum, using tobacco, or using the toilet.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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Storage

Store in the closed, original container in a well ventilated area out of direct sunlight. Store in a safe place away from foodstuffs, seeds or fertilizers. Store out of the reach of children.

Do not contaminate water, food, or feed by storage or disposal.

Other Information

Always read the label and any attached leaflet before use.

8. EXPOSURE CONTROLS /PERSONAL PROTECTION:

Engineering Controls

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment Eye/ Face Protection

To avoid contact with eyes, wear chemical goggles or shielded safety glasses. A emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection

To avoid contact with skin, wear cover all over with long-or short-sleeved shirt and long o short pants, chemical-resistant footwear plus socks and chemical resistant gloves. Wear chemical-resistant apron when cleaning equipment, mixing or loading. For overhead exposure, wear chemical-resistant headgear. An emergency eye wash or water supply should be readily accessible to the work area.

Respiratory Protection

Not normally required. If vapours or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene

Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

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9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical State: Liquid
Appearance: Pale yellow to amber colour clear liquid
Odour: Slight alcoholic odour
Specific Gravity: 0.919(20oC)
Boiling Point; N/A
Vapour Pressure:N/A
Solubility in Water: Form an emulsion in the water

10. STABILITY AND REACTIVITY:

Storage Stability: This material is stable under normal handling and storage conditions.
Condition: to Avoid. Excessive heat, sparks and open flame
Hazardous Decomposition: Under fire conditions may produce oxides of carbon, hydrogen and nitrogen.
Hazardous Polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION:

Toxicology Information

No harmful effects are expected if the precautions on the label and this MSDS are followed.

Acute Toxicity-Oral: LD50(rat):1046.13mg/kg(male) 883.74 mg/kg (female)

Acute Toxicity-Dermal;LD50(rabbit): >5000 mg/kg

Acute Toxicity-InhalationLC50(rat):>3.5 mg/l air-4 hours

Eye Irritation: Moderately irritant (rabbit).

Skin Irritation:Slightly irritant (rabbit).

Skin Sensitization Not a sensitizer(guinea pig).

12. ECOLOGICAL INFORMATION:

Acute Toxicity-Fish The following data is for the active ingredient, abamectin:

LC50(96 hr) (rainbow trout): 3.2 ug/L

LC50(96 hr) (bluegill sunfish): 9.6 ug/L

Acute Toxicity-Daphnia

EC50(48 hr) (Daphnia magna): 0.34 ppb

Acute Toxicity-Other Organisms:

LD50(Oral) (mallard ducks): 84.6 mg/kg

LD50(Oral) (bobwhite quail): > 2000 mg/kg

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Toxic to bees.LC50(28d)

(earthworms)

: 28 mg/kg soil

Environmental Fate:

Abamectin binds tightly to soil, with rapid degradation by soil microorganisms. No bioaccumulation.

13. DISPOSAL CONSIDERATIONS:

Product Disposal

Ideally the product should be used for its intended purpose. If there's a need to dispose of the product, approach local authorities who hold periodic collection of unwanted chemical. On site disposal of the product is not acceptable.

Container Disposal

Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer for recycling / reconditioning or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations. If no landfill is available, bury the containers below 500mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION:

Transport Information

It is a good practice to separate this product from food, food related materials, animal feedstuffs, seed or fertilizers during transport. Storage and Transport Follow the precautions indicated in this MSDS, Section 7: HANDLING AND STORAGE.

UN Number: (SeaTransport)

UN 2902

IMO Class/Packing Group Class 6 .1;

Packing Group: III

IMO Marine Pollutant: Marine Pollutant

IMO Proper ShippingName: Pesticide, liquid, toxic, N.O.S (Abamectin) 6.1 PG III

15. REGULATORY INFORMATION:

Risk Phrase: N/A

Safety Phrase: N/A

Poisons Schedule: No data

Hazard Category: Class II

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Packaging and Labeling

POISONOUS

KEEP AWAY FROM FOODSTUFF AND CHILDREN

READ THE LABEL BEFORE USE

16. OTHER INFORMATION:

DOSH Reg No: JKPP IS 127/438/2/2294

Email:

Golsam@golsamco.com

Date of preparation or last version of MSDS

Issue Date: 1 August 2011

Note:

While the information given herein is, to the best of our knowledge, correct and is given in good faith, we make no warranty, with respect hereto and disclaim all liability from reliance thereon. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose.