

Material Safety Data Sheet

Abamectin 1.8% EC

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND SUPPLIER

Product Name: Abamectin 1.8% EC

Active Ingredient: Abamectin

Formulation: Emulsifiable concentrates

Supplier: Shanghai Tenglong Agrochem Co., Ltd.

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2. HAZARDS IDENTIFICATION

Potential Health Effects: Relevant routes of exposure: Skin, lungs, eyes, ingestion

Adverse health effects from exposure to product or ingredients of product:

ACUTE:

Moderate toxicity and irritant via ocular, dermal, inhalation and ingestion routes.

Cause substantial but temporary eye injury. May be fatal if swallowed. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

Early signs of abamectin poisoning include mydriasis (dilated pupils), ataxia (unsteadiness) and muscle tremors.

CHRONIC:

Target organs: skin, eyes and central nervous system

Medical conditions known to be aggravated: None known.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

| Chemical Ingredients | CAS No. | Content (w/v) |
|---|------------|---------------|
| Abamectin Tech (B ₁ content) | 71751-41-2 | 18 g/L |
| Methanol | 67-56-1 | 250-350 g/L |
| Emulsifier OP-10 | 9002-93-1 | 150-200 g/L |
| Emulsifier 500 | 26264-06-2 | 10-30 g/L |
| Xylene | 1330-20-7 | Up to 1L |

4. FIRST AID MEASURES

First Aid

IF POISONING IS SUSPECTED, or any symptoms are serious, immediately contact the poison information centre, doctor or nearest hospital. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms, and follow the advice given.

INGESTION:

If victim is fully conscious, give 2-3 glasses of water to dilute, and get immediate medical attention. Induce vomiting as directed by a physician. Never give anything by mouth or induce vomiting in a person who is unconscious or convulsing.

SKIN:

Immediately remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and water. Obtain medical attention. Wash contaminated clothing before re-use.

EYES:

Immediately rinse eyes with a large amount of running water, holding eyelids apart to rinse the entire surface of the eye and lids. Obtain medical attention.

INHALATION:

Move to fresh air, clean up, and rest. Give artificial respiration if necessary. Contact Poison Centre or physician immediately.

NOTE TO PHYSICIAN:

Toxicity following accidental ingestion of the product can be minimized by inducing vomiting within one half hour of exposure. If toxicity 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) 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 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. There is no specific antidote.

5. FIRE FIGHTING MEASURES

Flash point and method: Non-flammable

Upper and lower flammable (explosive) limits in air: Not available

Autoignition temperature: Not available

Hazardous combustion products: Toxic gases including carbon monoxide, carbon dioxide, oxides of nitrogen, and smoke.

Extinguishing media: Dry chemical, foam, carbon dioxide. Firefighters should wear self-contained breathing apparatus and full protective clothing. Evacuate all non-essential personnel and animals. Discharges to the environment are to be controlled as quickly as possible to avoid contamination. Prevent use of buildings, area and equipment until properly decontaminated.

Sensitivity to explosion by mechanical impact: No

Sensitivity to explosion by static discharge: Low

6. ACCIDENTAL RELEASE MEASURES

Procedures for dealing with release or spill: Extinguish cigarettes and other ignition sources.

Wear protective clothing (see Section 8). Absorb spill in absorbent material such as



pet litter, sweep up and place in an approved chemical container. Clean up residue with towels moistened with methanol. Seal and label the container and handle in an approved manner. Do not allow spilled material to contaminate water supplies. On soils, skim off the upper contaminated layer and collect for disposal. Follow municipal and provincial regulations for spill reporting and disposal.

7. HANDLING AND STORAGE

Handling practices: KEEP OUT OF REACH OF CHILDREN and animals, and away from open flames or other sources of ignition. Avoid contact with eyes, skin or clothing and avoid breathing vapour or spray mist. Wear full protective clothing and equipment (see Section 8). After work, rinse gloves and remove protective equipment, and wash hands before eating, smoking, drinking, or using the toilet. Clean up spilled product immediately, and clean clothes and equipment after use. Wash contaminated clothing before re-use. Keep product, spray, wash or rinse water, and contaminated materials out of water, and away from access by people, animals and bees. Keep containers closed when not in use. Do not re-enter treated areas until residues have dried.

Appropriate storage practices/requirements: Store in original containers in a well-ventilated, cool, dry, secure area, inaccessible to children and domestic animals. Store away from heat or flame.

Keep separate from other products. Clean up spilled product immediately.

National Fire Code classification: Class IIIA combustible liquid

8. PERSONAL PROTECTION

Applicable control measures, including engineering controls:

Ensure work areas have ventilation and procedures sufficient to maintain airborne levels below the TLV. Provide safety showers and eyewash station near workplace. Keep this material out of water.

Personal protective equipment for each exposure route:

INGESTION: Avoid eating, drinking, smoking or cosmetic application in areas where there is a potential for exposure to this material. Always wash thoroughly after handling.

EYES: To avoid eye contact, wear chemical goggles or a full face shield.

SKIN: To avoid skin contact, wear full-length disposable protective clothing (e.g. Tyvek coveralls), waterproof boots, nitrile gloves, and a head covering.

INHALATION: To avoid breathing vapor or mist, wear an approved supplied air respirator or self-contained breathing apparatus.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance: Blue transparent liquid

Odour: Abamectin odour

Boiling point: Not available

Specific Gravity: 1.052 g/ml

Flammability: 302° F

Solubility in water: Product emulsifies in water

Viscosity: 15.797(20°C)

10. STABILITY & REACTIVITY

Chemical stability: Stable

Conditions to avoid: High heat, open flames

Incompatibility with other materials: Strong caustic solutions, strong acid solutions, oxidizing agents

Hazardous decomposition products: None known

Hazardous polymerisation: Will not occur.

11. TOXICOLOGICAL INFORMATION

Information on product:

LD50 (species and route)

ORAL: LD50, Rat 325 mg/kg (moderately toxic)

DERMAL: LD50, Rabbit 1400 mg/kg (moderately toxic)

LC50 (species)

INHALATION: LC50 Rat 3.5 mg/L air (4 hours) (low toxic)

Irritation data

EYE: Moderately irritating (rabbit)

SKIN: Slightly irritating (rabbit)

Results of studies on:

- Sensitisation: not a sensitiser
- Carcinogenicity: None observed
- Reproductive toxicity: Abamectin is a reproductive toxin in animal studies at doses acutely toxic to the maternal animal.
- Teratogenicity: In a study with mice, Abamectin was teratogenic (cleft palate) at doses higher than the toxic dose for the maternal animal.
- Mutagenicity: None observed (Ames Test and Micronucleus Test)
- Chronic exposure: Central nervous system effects in animals.

Other materials that show synergistic toxic effects together with the product: None known.

Other: Not available.

12. ECOLOGICAL INFORMATION

This section describes effects which could occur if this material is not handled in accordance with this data sheet.

The following information is presented in respect of the active ingredient:

Ecotoxic Effects:

Acute Oral LD50 (Bobwhite quail) > 2000 mg/kg

LC50 (96 hr) (Rainbow trout) 3.2 mg/l

EC50 (48 hr) (Daphnia) 0.34 µg/l

EC50 (7 d) (Algae) >100 mg/l

Toxic to bees

Environmental Fate: Biodegradable. DT50 (soil) 30 days typical.

Partition Co-Efficient (Kow): LogP = 4 (high)

Environmental Exposure: Product: None established

Limit: Active Ingredient: None established

Excipients: BHT 0.014 mg/l (water)

13. DISPOSAL INFORMATION

Product: Dispose of product by using it in accordance with the label. Do not burn. Waste product should be disposed of to an approved landfill.

Container: Dispose of to an approved landfill or agricultural recycling scheme. Do not burn. Do not use packaging for any other purpose.

14. TRANSPORT INFORMATION

Dangerous Goods:

UN Number: 2902

Proper Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (Abamectin 2%)

Class: 6

Subsidiary Class: None

Packing Group: III

Additional Information: MARINE POLLUTANT

Maximum Transport: 250 litres

Quantity (Non-Commercial)

Passenger Service Vehicle: Maximum quantity 1 litre

15. REGULATORY INFORMATION

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Delayed health hazard (chronic)

Section 313: Abamectin (1.9%) CAS#: 71751-41-2

CA PROPOSITION 65: n-Methylpyrrolidone (Code D)

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to

ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Tenglong Agrochem