-- A DIVISION OF TIDE GROUP

MAIN OFFICE: 21 HUBBLE, IRVINE, CA 92618, USA

Material Safety Date Sheet (MSDS)

MSDS# TIC-INC013002

Date: 4/23/09 revised

Section 1 - Product Chemical and Company Identification

Product name TimectinTM 0.15EC Ag, TimectinTM 0.15EC T&O

Product Use Inseticide

EPA Reg.No. 84229-1, 84229-2

Company Tide International, USA, Inc.

Emergency phone Chemtrec 1-800-424-9300

Tide International USA, Inc. 1-949-679-3535

(for technical information)

Section 2 - Composition /Information on Ingredients

Active Ingredient CAS number w/w % Abamectin 71751-41-2 1.9% Other ingredient 98.1%

Section 3 - Hazards Identification

WARNING! Causes substantial but temporary eye injury. Do not get in eyes. Harmful if absorbed through skin or if swallowed. Avoid contact with skin or clothing.

Section 4 - First Aid Measures

If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and follow the advice given. Show this Material Safety Data Sheet to the doctor.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. 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.

If on skin or clothing: 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.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to -mouth, if possible. Call a poison control center or doctor for further treatment advice.

Note to physician:

Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Toxicity following accidental ingestion of the technical product can be minimized by early administration of chemical adsorbents (e.g., active charcoal).

If toxicity from exposure has progresses 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 measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs,

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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.

Section 5 - Fire Fighting Measures

Fire and Explosion

Flash point: >225°F

Flammable Limits (% in Air):

Upper: % Not Applicabl Lower: % Not Applicable

Autoignition Temperature: Not available

Flammability: No-flammable

Unusual Fire, Explosion and Reactivity Hazards

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

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.

Section 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 outlined in Section 8. 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

Section 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.

Section 8 - Exposure Controls/Personal Protection

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Personal Protective Equipment

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category E on an EPA chemical resistance category selection chart.

Applicators and other handlers must wear:

- · Long-sleeved shirt and long pants
- Socks and shoes.
- Chemical-resistant gloves (such as barrier laminate, nitrite rubber, neoprene rubber, viton).
- Protective eyewear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Section 9 - Physical and Chemical Properties

Appearance: Pale amber liquid Odor: Slightly pungent odor

Flammability:>225°F

pH value: 3.78

Density: 1.01g/cm3 at 24°C

These physical data are typical values based on material test but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis and any specific lot or as specification items.

Section 10 - Stability and Reactivity

Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Incompatibility (Material to Avoid): Not known Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information based on Abamectin technical

Acute Oral LD_{50:} Acute Oral LD₅₀ for albino rats is estimated to be 1750 mg/kg in females.

Acute Dermal LD₅₀: Dermal LD50 for rabbits >5050mg/kg in males and females.

Inhalation LC_{50:} Inhalation LC₅₀ is greater than 2.56 mg/l to albino rats.

Skin irritation: Non-irritating to skin (rabbits). Based on the 72-hour observation only, it is assigned to Toxicity category IV.

Eye irritation: Severely irritation to eyes (rabbits). Since all positive effects had cleared on Day 21 after dosing, It is assigned to Toxicity category III





Skin sensitization: It produced no irritation in the test animals (Group II) or the naive control animals (Group I) after the challenge treatment, and the therefore did not elicit a sensitizing reaction in guinea pigs.

Section 12 - Ecological Information (Based on the active Ingredient)

Abamectin is toxic to fish and aquatic invertebrates.

Rainbow trout: LC50 to rainbow trout was 0.046mg/L (96h). The NOEC (No Observed Effect

Concentration) for survival was 0.025mg/L.

Daphnia: The NOEC (No Observed Effect Concentration) of Abamectin tech was 0.2µg/L, and

the EC₅₀ was $0.405\mu g/L$ (48h)

Section 13 - Disposal Considerations

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Section 14 - Transport Information

Transport Classification - Land (ADG) and Sea (IMDG):

UN No.: 2902 **Class**: 6.1

Packing Group: III

Proper Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S. (CONTAINS ABAMECTIN)

Additional Information: ABAMECTIN 1.9%, MARINE POLLUTANT

Section 15 - Regulatory Information

EPCRA SARA Title III Classification Section 311/312 Hazard Classes:

Acute Health Hazard Chronic Health Hazard

Fire Hazard



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California Proposition 65

Not Applicable

CERCLA/SARA 302 Reportable Quantity (RQ)

None

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable

TSCA Status

Exempt from TSCA, subject to FIFRA

Section 16 - Other Information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Tide InternationalUSA,Inc. assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data.