



TIDE INTERNATIONAL USA, INC.

—A DIVISION OF TIDE GROUP

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

FAX: 1-949-679-3538

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HTTP://www.tide-usa.com

Safety Data Sheet (SDS) of AgMectin[®] 0.15EC Insecticide/Miticide

Section 1 – Chemical Product and Company Identification

| | |
|-----------------|--|
| Product name | AgMectin [®] 0.15EC Insecticide/Miticide |
| Synonyms name | None |
| Chemical Class | Avermectin |
| Recommended Use | Insecticide |
| Company details | |
| Importer | Tide International USA, Inc. 21 Hubble, Irvine, CA 92618 |
| EPA Reg. No. | 84229-2 |
| Emergency phone | CHEMTREC 1-800-424-9300 Tide International USA, Inc. 1-949-679-3535 |

Section 2 – Hazard(s) Identification

Classified as Hazardous according to criteria of the Hazard Communication Standard (HCS) or 29 CFR §1910.1200 (2012).

Classification of the substance or mixture:

- Acute oral (Category 4)
- Eye irritation (Category 2A)
- Acute aquatic toxicity (Category 1)
- Aquatic Chronic (Category 1)

Label elements

HCS labeling

Hazard pictograms (HCS)



Signal Word: **WARNING**



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GHS Hazard Statements:

Combustible liquid
Harmful if swallowed
Suspected of damaging fertility or the unborn child
May cause damage to organs
Causes serious eye irritation
Very toxic to aquatic life with long lasting effects.

Other hazard information:

NFPA Ratings: Health-2 Flammability-2 Reactivity-0

Signs and Symptoms of Systemic Effects:

Causes eye and skin irritation. Harmful if swallowed or absorbed through the skin. Allergic skin reactions are possible.

Environmental hazards:

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your country agriculture commissioner to determine use limitations that apply in your area.

Unusual Fire, Explosion and Reactivity Hazards

Combustible liquid. 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.

Section 3 - Composition / Information on Ingredients

| Active ingredient | CAS No. | Content (w/w,%) | ACIGH |
|-------------------|------------|-----------------|--------------------------|
| Abamectin | 71751-41-2 | 1.9 min. | NA |
| Propylene glycol | 57-55-6 | 15.0 max | 10 mg/m ³ TWA |



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| Active ingredient | CAS No. | Content (w/w,%) | ACIGH |
|---|-------------|-----------------|----------------------------------|
| Butylated Hydroxytoluene (BHT) | 128-37-0 | 1.0 | ACGIH TWA 2 mg/m ³ |
| Agnique KE-3658 | / | 18.0-23.0 | NA |
| Toximul 8242 | / | 10.0-15.0 | NA |
| Toximul 8320 | / | 15.0-20.0 | NA |
| Stepfac 8181 (Contains*) | / | 1.0-3.0 | NA |
| *(Polyoxyethylene tridecyl ether phosphate) | 9046-01-9 | (99.0) | NE |
| *(Phosphoric acid) | 7664-38-2 | (1.0) | 1mg/m ³ TWA |
| *(1,4-Dioxane) | 123-91-1 | (1000ppm) | 20ppm |
| Other ingredient deemed not to be hazardous | Proprietary | Balance | - |

Section 4 – First-Aid Measures

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.

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. Get medical advice/attention.

If swallowed: Immediately call a POISON CENTER or doctor/physician if you feel unwell. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the 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: Remove person to fresh air and keep comfortable for breathing. If person is not breathing, call 911 for an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a POISON CENTER or doctor/physician if you feel unwell.

Note to physician: There is no specific antidote. Treat symptomatically.

Section 5 – Fire-Fighting Measures

Flashpoint: 225°F

Combustible: Combustible liquid

Means of Extinction: Extinguish fire using foam blanket, carbon dioxide or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained.

Hazardous combustion products: 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.



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Fire fighting instructions: 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

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

KEEP OUT OF REACH OF CHILDREN!

Handling:

No smoking. Eating or drinking should be allowed where material is used or stored. Wear protective equipment to prevent skin and eye contamination.

When opening the container, preparing spray and using prepared spray, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves and goggles. For space applications, wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow length PVC gloves, goggles and half facepiece respirator with dust cartridge or canister.

Avoid release to the environment.

Storage:

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Keep cool. Keep away from heat/sparks/open flames/hot surfaces. Do not use or store near heat or open flame. Do not store food, beverages or tobacco products in the storage area.

Section 8 - Exposure Controls/Personal Protection

Exposure limit values

| Components. | CAS-No | Control parameters | Basis |
|------------------|------------|--------------------------|-----------|
| Abamectin | 71751-41-2 | NA | NA |
| Propylene glycol | 57-55-6 | 10 mg/m ³ TWA | ACGIH-TWA |
| Phosphoric acid | 7664-38-2 | 1mg/m ³ TWA | ACGIH-TLV |
| | | 3ppm STEL | ACGIH-TLV |



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| Components. | CAS-No | Control parameters | Basis |
|--------------------------------|----------|-------------------------------------|--------------------------------|
| | | 1 mg/m ³ TWA | NIOSH |
| | | 3 mg/m ³ ST | NIOSH |
| | | 1 mg/m ³ TWA | OSHA |
| | | 3 mg/m ³ STEL | OSHA |
| 1,4-Dioxane | 123-91-1 | 20ppm max PEL | OSHA |
| Butylated Hydroxytoluene (BHT) | 128-37-0 | 2 mg/m ³ (inhalable, 8h) | ACGIH TLV |
| | | 10 mg/m ³ (10h) | NIOSH/OSHA TWA IARC Group 3 |

Engineering controls

Use in ventilated areas. Keep containers closed when not in use.

Personal protection:

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, nitrile 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.

Respiratory Protection: A combination particulate/ organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an HE prefilter.

Eye Protection: 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.



Tightly sealed goggle

Skin and Body Protection: To avoid contact with skin, wear coveralls over with long- or short-sleeved shirt and long or short pants, chemical-resistant footwear plus socks and chemical resistant gloves. Wear chemical-resistant apron when cleaning equipment, mixing or loading. For



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overhead exposure, wear chemical-resistant headgear. An emergency eyewash or water supply should be readily accessible to the work area.

Hand Protection:



Chemical resistant gloves

Specific Hygiene Measures: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Wash clothing and other absorbent materials that have been exposed to this product. Follow the manufacturer's instructions for cleaning and maintaining PPE.

Environmental controls

See Sections 6, 7, 12, 13.

Section 9 - Physical and Chemical Properties

Appearance: Pale amber liquid

Odor: Slightly pungent odor

Odor threshold: No Data Available

pH: 3.5-5.5

Melting point/freezing point: No Data Available

Initial boiling point and boiling range: No Data Available

Flammability: Combustible Liquid, flash point >225°F

Explosibility: Not have explosive characteristics.

Evaporation rate: No Data Available

Vapor pressure: 7.5 x 10⁽⁻⁸⁾ mmHg @ 77°F (25°C), abamectin

Vapor density: No Data Available

Density: .1.01g/cm³

Solubility: Emulsifiable

Octanol/water partition coefficient: log Kow = 4.4 at pH 7.2 at 20 °C

Auto-ignition temperature: No Data Available

Decomposition temperature: No Data Available

Viscosity: 135 cps at 24°C, 70cps. at 39°C

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

Section 10 - Stability and Reactivity

Reactivity: Product will not undergo polymerization



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Chemical stability: Stable under normal use and storage conditions.

Possibility of hazardous reactions: Will not occur hazardous polymerization.

Conditions to avoid: Excessive heat, sparks and open flame.

Incompatible Materials: None reasonably foreseeable.

Hazardous decomposition products: Can decompose at high temperatures forming toxic gases. Under fire conditions may produce oxides of carbon, hydrogen and nitrogen.

Section 11 - Toxicological Information

Exposure routes: Eyes, skin, ingestion & inhalation.

Toxicity:

| | |
|---------------------------|---|
| Acute oral toxicity | LD ₅₀ for female rat 1750mg/kg |
| Acute dermal toxicity | LD ₅₀ for rabbits >5050mg/kg |
| Acute inhalation toxicity | LC ₅₀ (4h) >2.56mg/L |
| Skin irritation | No skin irritation. |
| Eye irritation | Severely irritating to eyes (rabbits). |
| Sensitization | No skin sensitizing reaction in guinea pig. |

Chronic Toxicity:

Abamectin: Central nervous system effects in animals.

Carcinogenicity:

Abamectin: Not carcinogenic (rat); Not listed by ACGIH, NTP, IARC, or OSHA.

Reproduction:

Abamectin: No teratogenic potential.

Developmental Toxicity:

Abamectin: Animal tests with metsulfuron-methyl have not demonstrated developmental effects.

Neurotoxicity:

Abamectin: No evidence of neurotoxicity.

Mutagenicity:

Abamectin: Negative

Section 12 - Ecological Information

Ecotoxicity:

Highly toxic to fish, invertebrates, birds and bees. Not bioconcentrateable in fish.

Avian toxicity: Abamectin

Bird (Bobwhite Quail) LD50 Oral > 2000 mg/kg

Birds (8-day dietary - Bobwhite Quail) LC50/EC50: 3102 ppm

Birds (8-day dietary - Mallard Duck) LC50/EC50: 383 ppm

Aquatic organism toxicity: Abamectin



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LC50 to rainbow trout 0.046mg/L (96h)

EC50 to daphnia 0.405µg/L (48h)

Invertebrates (Water Flea) LC50/EC50: 0.00037 ppm

Other non-target organism toxicity: Abamectin

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Bees: Bees contact LC50/EC50 0.002 ug/bee, oral LD50 of 0.009 ug/bee

Worms: Earthworms will not be adversely affected by use of abamectin at recommended application rates. The 28-day LC50 for abamectin in earthworms is 28 ppm.

Persistence/Degradability: Not persistent in soil.

Bioaccumulative potential: Low bioaccumulation potential.

Mobility in soil: Low mobility in soil.

Other adverse effects: No Data Available

Section 13 - Disposal Considerations

Dispose of contents and container in accordance with local regulations. End users must dispose of any unused product as per the label recommendations.

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. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Section 14 - Transport Information

| | |
|------------------------------|--|
| D.O.T. Shipping Name: | PESTICIDE, LIQUID, TOXIC, N.O.S. (CONTAINS 1.9% ABAMECTIN) |
|------------------------------|--|



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| | |
|---------------------------------|--------------------------------------|
| Technical Shipping Name: | AgMectin 0.15EC Insecticide/Miticide |
| Packing Group: | III |
| D.O.T. Hazard Class: | 6.1 |
| U.N/N.A. Number: | UN2902 |
| Marine pollutant | Yes |

Section 15 - Regulatory Information

FIFRA –

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from target areas. Do not contaminate water when disposing of equipment wash water or rinsate.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

Use of this product may pose a risk to threatened and endangered species of fish, amphibians, crustaceans (including fresh water shrimp), and insects. All use of this product in the state of California should comply with the recommendations of the California Endangered Species Project. Before using this product in California, consult with your county agriculture commissioner to determine use limitations that apply in your area.

PHYSICAL OR CHEMICAL HAZARDS

Combustible: Do not use or store near heat or open flame.

US Federal Regulations

TSCA list:

All components are listed or exempted.

SARA Title III - section 302 - notification and information None



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SARA Title III - section 313 - toxic chemical release reporting None

SARA Title III - section 311/312 - hazard identification

Acute health hazardous

Chronic health hazardous

This product contains none of the components listed as Extremely Hazardous substances.

OSHA Hazardous Components:

CAS# 123-91-1

CAS# 7664-38-2

CAS# 9046-01-9

CAS# 128-37-0

US States Regulatory Reporting

CA Prop65

This product contains substances (abamectin) known to the State of California to cause reproductive harm.

This product may contain the following ingredient(s) known to the State of California to cause cancer, birth defects or either reproductive harm : 1,4-dioxane (CAS RN : 123-91-1).

State information:

Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

Canadian Regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

Environmental

CERCLA

None of the chemicals in this material have an RQ.

Section 16 - Other Information

SDS# TIC-INS842292B

Created date: 03/17/2015

Update date:

Revised for:

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 International USA, Inc. assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of this data.