

AGNIQUE[®] MMF

MOSQUITO LARVICIDE & PUPICIDE

Monomolecular Surface Film for Control of Immature Mosquitoes and Midges

CAN BE USED IN: • Habitats Containing Birds, Fish, Pets and Wildlife
• Ponds • Pools • Ditches • Irrigation Water • Potable Water Containers
• Flood Water Areas • Other Areas Where Mosquitoes Breed and Develop

STOP MOSQUITOES BEFORE THEY START



ACTIVE INGREDIENT

Poly (oxy-1,2-ethanediyl), α -(C₁₆₋₂₀ branched and linear alkyl)- ω -hydroxy (100%)

KEEP OUT OF REACH OF CHILDREN

CAUTION

FIRST AID (TREATMENT)

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 IN EYES:

- Hold eye open and rinse slowly and gently with plenty of 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.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMAN AND DOMESTIC ANIMALS

CAUTION: Avoid contact with skin, eyes or clothing.
Wash thoroughly with soap and water after handling.

STORAGE AND DISPOSAL

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

Pesticide Storage: Do not allow storage containers to rust. Rust contaminants may clog spray nozzles. Do not allow product to freeze.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by state or local authorities.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. To be used in governmental mosquito control program, by professional pest control operators, by homeowners, or in other mosquito or midge control operations.

APPLICATION DIRECTIONS

This product may be applied by both ground and aerial applications. To use, calculate the desired rate based on water surface area. The water depth is not a factor in rate determination. Spray the desired rate of AGNIQUE[®] MMF onto the surface of the water. No dilution is required and a fan spray is recommended. The MMF will spread to cover hard to access areas. For large areas with dense vegetation, apply in several locations to assist in the spreading action. Do not pour or inject a stream spray directly into water. AGNIQUE[®] MMF is not visible on the surface of the water. Excess MMF on the water surface will form a white globule.

NOTICE

Cognis Corporation makes no warranty, express or implied of merchantability, fitness or otherwise concerning the use of this product other than as indicated on the label. User assumes all risks, storage or handling not in strict accordance with the label.



Cognis Corporation

4900 Este Avenue
Cincinnati, OH 45232-1419
1-800-254-1029

24 HOUR EMERGENCY PHONE
CHEMTREC 1-888-329-2626

For information on this pesticide product (including health) concerns, medical emergencies or pesticide incidents, call the National Pesticide Telecommunication Network at 1-800-858-7378.

EPA Reg. No. 53263-28

EPA Est. No. 53263-OH-001

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SPECIMEN LABEL

AGNIQUE[®] MMF

MOSQUITO LARVICIDE & PUPICIDE

Stop Mosquitoes
Before They Start



APPLICATION SITES

This product is for the control of immature mosquitoes and midges in areas where they breed and develop. This product may be used in habitats including potable water and irrigation waters, permanent and semi-permanent waters, irrigated croplands and pastures, and waters with outlets to natural water bodies. The following habitats provide examples of where the product can be applied but is not intended to be all inclusive.

Polluted Waters: Sewage lagoons, percolation ponds, animal waste effluent lagoons, septic ditches, waste treatment facility areas, etc.

Fresh and Brackish Water: Fresh water and salt marshes, ponds, lakes, storm water, drainage systems and retention & detention basins, roadside ditches, grassy swales, flooded fields and pastures, potable water containers, reservoirs, irrigated croplands, temporary and semi-permanent woodland pools, tidal water, and other areas where water accumulates.

Residential Areas: Ponds, storm water basins, tree holes, rain barrels, landscape and ornamental ponds, tires, storm drains, stationary flower pots, pot holes, gutters, tarps, potable water containers and residential areas where water accumulates and provides ideal breeding habitats for mosquitoes or midges. **Not for Homeowner Use in the States of CA and NY.**

Application Rates	Application Rates	
	MOSQUITO HABITAT	MIDGE HABITAT
Fresh and Brackish Water*	0.2 – 1.0 gallons/acre* 2 – 10 liters/hectare*	0.5 – 1.0 gallons/acre^ 5 – 10 liters/hectare^
Polluted Waters**	0.35 – 1.0 gallons/acre** 3.5 – 10 liters/hectare**	0.5 – 1.0 gallons/acre^ 5 – 10 liters/hectare^

* Use the lower rate (0.2 gallons/acre) when only pupae control is desired and in sites with no emergent vegetation and low organic content.
 * Use higher rates when emergent or surface vegetation is present, due to the wicking action of the product. The more vegetation or the drier the vegetation, the higher the required rate.
 ** Use higher rates in polluted water habitats for effective control.
 ^ Reapply every two weeks during the midge season.

(Application rates for the trigger applicator spray bottle)

Surface Area of Standing Water	Application Rates
1 to 75 square feet	One full trigger application of the spray bottle containing AGNIQUE [®] MMF*
75 – 100 square feet	Two full trigger applications of the spray bottle containing AGNIQUE [®] MMF*
Every additional 100 square feet	Two to three full trigger applications of the spray bottle containing AGNIQUE [®] MMF*
1,000 square feet	20 – 25 full trigger applications (1 – 1.5 oz.)

* The application rate can vary between 1 and 3.0 oz. per 1000 sq. ft. (0.1 to 0.3 oz. / 100 sq. ft.). Maximum application rate is 3.0 oz per 1000 sq. ft.

APPLICATION INFORMATION

Rate of Kill: The rate of kill when using MMF is dependent on the species, the life stage, the habitat and the temperature. Pupicidal action will typically result in 24 hours. Larvicidal action will usually result in 24-96 hours. If the film is present, control will be achieved.

Persistence: The AGNIQUE[®] MMF surface film typically persists on the water's surface for 5 to 22 days. Polluted waters will cause more rapid degradation of the film. Higher application rates will prolong film life and extend the interval between retreatment.

Species: Mosquitoes and midges that require little or no surface contact for breathing will be affected by the product during the pupae and emerging adult life stages.

Wind: The high end of the dosage rate is recommended when spraying habitats where multi-directional winds of 10mph (16km/hr) or greater are expected to persist. While the film will be pushed by the winds, it will re-spread quickly once the winds have subsided. If persistent unidirectional winds of 10 mph (16km/hr) or greater are expected, the displacement of the surface film may result in poor control.

Spray Tanks: Thoroughly clean and dry the spray system of contaminants such as petroleum oils, water, detergents and conventional toxicants prior to adding AGNIQUE[®] MMF. Detergents will destroy the film-forming of the AGNIQUE[®] MMF; other contaminants (water and oil) can result in the formation of an unsprayable paste.

Expanding Waters: Significant expansion of the habitat's surface due to rain or tidal fluxes can be compensated for by using a dosage that is based on the largest expected surface area. This will ensure complete coverage, and eliminate the need for re-treatment of the flooded area.

Dilution: AGNIQUE[®] MMF is typically applied to the water's surface without dilution. However, if it is desired to spray higher volumes of liquid, AGNIQUE[®] MMF may be diluted using a high shear injection system that dilutes the MMF at the nozzle to a maximum of 10% in water. Do not add AGNIQUE[®] MMF to water in non-agitated spray systems. Conventional bypass recirculation will not provide adequate agitation to effectively mix MMF in water. AGNIQUE[®] MMF may also be diluted in AGNIQUE[®] MMF Diluent or Eco Ash A. AGNIQUE[®] MMF may be diluted 1 part MMF to 4 parts or greater of diluents. Fill the spray tank or container with the desired amount of AGNIQUE[®] MMF Diluent or Eco Ash A and then add the correct amount of AGNIQUE[®] MMF. Agitate to ensure a homogeneous solution. When diluting with AGNIQUE[®] MMF Diluent or Eco Ash A, the use of metering pumps, injector systems or other mixing systems is optional.

When a different dilution rate is used, adjust the application rate accordingly. Do not use less than 4 parts diluents to 1 part MMF because it may not form a stable, homogenous solution.



Cognis Corporation
4900 Este Avenue
Cincinnati, OH 45232-1419
1-800-254-1029

SPECIMEN LABEL

Material Safety Data Sheet

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SDS no. : 277981

AGNIQUE MMF

Revision: 12/16/2009

printing date: 12/16/2009

1. Chemical product and company identification

Product name:

AGNIQUE MMF

Refer to the separate packaging label for additional product information, precautionary statements and directions for use.

Supplier

Cognis Corporation
5051 Estecreek Drive
Cincinnati, OH 45232-1446
USA
Phone: +1 (866) 910-0598
Fax-no.: +1 (513) 482-3576

Emergency Information Chemtrec:

+1-800-424-9300

2. Composition / information on ingredients

General chemical description:

Mosquito Larvicide and Pupicide

COMPONENT:	CAS-No.	CONCENTRATION (Wt. %):
Poly(oxy-1,2-ethanediyl), .alpha.-(C16-20 branched and linear alkyl)-.omega.-hydroxy (2EO)	881022-11-3	100

3. Hazards identification

EMERGENCY OVERVIEW

Caution: Causes eye irritation.

State:

liquid

Odor:

little intrinsic odour

Color(s):

light yellow

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Routes of entry:

Inhalation, Skin contact, Ingestion

Potential Health Acute Effects:

Inhalation:

Considered to be non-toxic by animal tests.

Skin contact:

not irritating

Eye contact:

May cause eye irritation.

Ingestion:

Similar materials are not considered toxic.

Potential Chronic Health Effects:

None known

4. First aid measures

After inhalation:

Supply of fresh air, mouth-to-mouth resuscitation if necessary, keep warm. If adverse health effects persist seek medical advice.

After skin contact:

Wash thoroughly with soap and water.

After eye contact:

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Do not rub eyes; mechanical action may cause corneal damage.

If adverse health effects develop seek medical attention.

After ingestion:

Do not induce vomiting, seek medical advice immediately.

5. Fire fighting measures

Flash point:

365 °F (185 °C)

no information

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Suitable extinguishing media:

Carbon dioxide.
Dry Chemical
Foam.
Water Spray

Special protection equipment for firefighters:

Wear self-contained breathing apparatus.
Wear full protective clothing.

Hazardous combustion products:

Carbon dioxide., carbon monoxide

Additional fire fighting advice:

In case of fire, keep containers cool with water spray.
Water spray may be used to flush spills away from fire.

6. Accidental release measures

Process for cleaning and take-up:

Using adequate protective equipment, add dry material to absorb spill (if large spill, first dike to contain).
Pick up spilled material and containerize for recovery or disposal.
Flush area with water to remove residues.

7. Handling and storage

Storage:

Storage conditions to keep:

Ensure that storage and workrooms are adequately ventilated.
Keep container tightly sealed.

8. Exposure controls / personal protection

Indication for system design:

Ensure adequate ventilation.

Personal protection measures:

Respiratory protection:

Not applicable with adequate ventilation.

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Hand protection:

Protective gloves made of rubber.

Eye protection:

Safety glasses with side shields.

9. Physical and chemical properties

General description:

State: liquid
Odor: little intrinsic odour
Color(s): light yellow

Designation

pH-value; Conc.: 1 % product

Value

6.9

Method

no information

Boiling point

> 100 °C (> 212°F)

no information

Melting point

< 25 °C (< 77°F)

no information

Vapor density:

Heavier than air

Specific gravity

0.890

no method

Solubility in Water

Slight (0.1 to 1 %)

no information

10. Stability and reactivity

Stability:

Dangerous decomposition products:

None if used for intended purpose.

Decomposition advices:

No decomposition if used according to specifications.

Reactivity:

Materials to avoid:

Strong Acids
Bases
Oxidizers

Hazardous polymerization:

Will not occur

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11. Toxicological information

General toxicological information:

No toxicity information available or testing conducted on this product.

Any health or toxicological information included in Section 3 was based on data associated with the components or an analogous product.

12. Ecological information

General ecological information:

no data available

Advice of environmental fate:

Not determined.

13. Disposal considerations

Waste disposal of product:

All recovered material should be packaged, labeled, transported, and disposed or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices.

Avoid landfilling liquids.

Reclaim where possible.

Waste disposal of packaging not cleansed:

Collection and delivery to recycling enterprise or other registered elimination institution.

14. Transport information

General information:

Not hazardous according to RID, ADR, ADNR, IMDG, IATA-DGR, CFR and TDG.

The transport information provided represents the regulatory transport classification of the product without consideration to packaging, quantity, or modal restrictions and exceptions. It is the user's responsibility to determine the appropriate packaging and modal requirements and/or limitations for the product quantity being shipped.

15. Regulatory information

TSCA Inventory Status:

This product is excluded pursuant to Section 3(2)(B)(ii) of the Toxic Substances

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Control Act [FIFRA Exclusion].

SARA 311/312 Hazard Categories:

Immediate Health

TSCA 12(b) Components:

none

SARA 313 Toxic Chemicals:

none

SARA 302 Extremely Hazardous Substances:

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA)
SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

ETHYLENE OXIDE CAS: 75-21-8 <10PPM

CERCLA Hazardous Chemicals:

US. EPA CERCLA Hazardous Substances (40 CFR 302)

ETHYLENE OXIDE CAS: 75-21-8 <10PPM
1,4-DIETHYLENEOXIDE CAS: 123-91-1 <100PPM

California Proposition 65:

This product contains the following chemical/s known to the State of California to cause cancer and/or birth defects or other reproductive harm.

ETHYLENE OXIDE CAS: 75-21-8 <10PPM
1,4-DIOXANE CAS: 123-91-1 <100PPM

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16. Other information

NFPA Rating (US)	Value
Health	2
Fire	1
Reactivity	0
Special Hazard	

HMIS Rating (US)	Value
Health	2
Flammability	1
Reactivity	0

All information, recommendations, and suggestions appearing herein concerning our product are based upon tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity, and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, express or implied, is being made as to the effects of such use, the results obtained, or the safety and toxicity of the product nor is their any assumed liability arising out of use, by others, of the product referred to herein. The information herein is not to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.