

goldschmidt

AROSURF® MSF

MONOMOLECULAR SURFACE FILM
FOR CONTROL OF MOSQUITO LARVAE AND PUPAE

ACTIVE INGREDIENT: Poly(oxy-1, 2-ethanediyl), α -isooctadecyl- ω -hydroxy-100%
CAS NUMBER: 52292-17-8

EPA EST. NO. 56630-WI-1

EPA REG. NO. 56630-3

KEEP OUT OF REACH OF CHILDREN

CAUTION

STATEMENT OF PRACTICAL TREATMENT

IF ON SKIN: Wash with plenty of soap and water.

Get medical attention if irritation persists.

IF IN EYES: Flush with plenty of water. Get medical attention if irritation persists.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

NOTICE: Goldschmidt Chemical Corp. 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 of use, storage or handling not in strict accordance with accompanying label.

GOLDSCHMIDT CHEMICAL CORP. • HOPEWELL, VA 23860 24-HOUR EMERGENCY PHONE 800-269-5006

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

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

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Refer to technical bulletin prior to use.

STORAGE AND DISPOSAL

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

STORAGE: Do not allow water to stand on drum top for prolonged periods of time. Water may seep into drums (through weeping) and cause rust formation which may clog spray nozzles.

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: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state or local authorities.

SPRAY TANK AND MIXING PRECAUTIONS

Thoroughly clean spray systems of contaminants such as petroleum oils, conventional toxicants, and detergent residues prior to the addition of technical AROSURF MSF or when formulating AROSURF MSF with water to prevent possible adverse product interactions and environmental effects. Detergents can act to destroy the film-forming properties of AROSURF MSF. Diesel Oil + AROSURF MSF + water can form a pasty unsprayable material.

Spray tanks should be free of water when using technical AROSURF MSF in non-agitating systems.

Ground spray systems should be equipped with high shear agitation (e.g. paddle) when adding AROSURF MSF to water in spray tanks. Do not add AROSURF MSF to water in spray systems that do not have agitation.

Premixing of AROSURF MSF with water in high shear agitation systems is required prior to addition to aircraft spray systems. Conventional bypass recirculation will not provide adequate agitation to effectively mix AROSURF MSF with water.

APPLICATION CONSIDERATIONS

AROSURF MSF is not visible on the surface of the water. To check the habitat for the presence and persistence of AROSURF MSF, add a drop of ADOL® Indicator Oil to several locations in the habitat, especially those downwind. If the drop of Indicator Oil forms a tight bead on the surface of the water, AROSURF MSF is present.

Persistent unidirectional winds of 10 mph or greater, surface drainage overflow, or runoff will usually result in poor mosquito control due to displacement or removal of AROSURF MSF from the habitat.

Mosquitoes that require little or no surface contacts for breathing, i.e., *Mansonia spp.*, *Cochlioides spp.*, *Culex erraticus*, *Culex pilosus*, etc. require properly timed applications at sensitive (surface contacting) stages - the pupae to emerging adult - for maximum impact. The high end of the dosage range is recommended.

The high end of the dosage range is recommended when spraying habitats whose surface characteristics are severe (highly obstructed) to compensate for loss of AROSURF MSF on vegetation or floating debris and to ensure adequate persistence and effective spreading/re-spreading.

The high end of the dosage range is recommended when spraying habitats where multi-directional winds of 10 mph or greater are expected to persist for 24 hours after treatment to ensure adequate persistence and effective spreading/re-spreading.

Significant expansion of the water's surface area from rain or tidal fluxes after the application can be compensated by a dosage that is based on the expected water surface area. This will help assure adequate AROSURF MSF persistence and will eliminate the need for the re-treatment of mosquito broods resulting from the new water.

Application of 0.75-1.0 gal/acre can be useful in controlling *Culex spp.* in dynamic (continuous breeding) permanent habitats such as sewage treatment systems. These higher applications prolong film life and thus extend the interval between re-treatment.

Mosquito Habitat		Recommended Application Rates* (Gal/Surface Acre) According to Developmental Stage	
Description	Examples	Larvae	Pupae
Semi-permanent or permanent fresh (including potable and irrigation sources) or salt water habitats with no, low, moderate or high concentrations of emergent or surface vegetation.	Salt-marshes, ponds, storm water, retention/detention basins, roadside ditches, grassy swales, pot holes, fields, reservoirs, irrigated croplands etc.	0.3 - 0.5	0.2 - 0.3
Semi-permanent or permanent polluted water habitats containing no, low, moderate or high concentrations of algal mats, emergent or surface vegetation or organic/inorganic debris	Pumping station bunkers, settling, polishing, and evapo-percolation ponds of sewage treatment systems; drainage areas containing effluent from slaughter houses etc.	0.4 - 0.5	0.2 - 0.3

NOTE: LARVICIDAL ACTION WILL USUALLY RESULT IN 24-72 HOURS. PUPICIDAL ACTION WILL USUALLY RESULT IN 24 HOURS. REAPPLY AS NECESSARY.

*AROSURF MSF may also be applied at the recommended rates in water-based formulations at up to 10 percent by volume.

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NET CONTENTS 5 Gal. (17.2 kg.)