



MATERIAL SAFETY DATA SHEET

I - PRODUCT IDENTIFICATION

Product: O-ACE-sis® Algacide 60 Plus
Chemical Family:
Formula:
CAS Number: 31512-74-0
Synonyms:

COMPANY IDENTIFICATION

AllChem Performance Products
6010 NW First Place
Gainesville, FL 32607
Tel: 352-378-9696

DISTRIBUTED BY

Water Techniques, Inc.
157 Pickett's Way
Acworth, GA 30101
Tel: 770-966-0250

II - COMPOSITION, INFORMATION ON INGREDIENTS

Chemical or Common Name	Exposure Limits	
	OSHA PEL:	ACGIH TLV:

1) Poly[oxyethylene(dimethyliminio)ethylene], 60%

(dimethyliminio)ethylene dichloride

The remainders of the components comprise proprietary information

III - HAZARDS IDENTIFICATION

Primary Route(s) of Entry:

Ingestion:	()
Inhalation:	(X)
Skin Contact:	(X)
Eye Contact:	(X)

Primary Health Hazards (Acute and Chronic): The effects of chronic exposure to this product have not been fully evaluated.

Carcinogenity Listings:

OSHA:	0
NTP:	0
IARC:	0

Signs & Symptoms of Acute Exposure:

Ingestion: Ingestion is not expected to be a primary route of exposure

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Inhalation: Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.

Skin Contact: Slightly hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or occasional blistering.

Eye Contact: Slightly hazardous in case of eye contact (irritant).

Medical Conditions Aggravated By Exposure:

IV – FIRST AID MEASURES

Emergency and First Aid Procedures:

Ingestion: DO NOT INDUCE VOMITING. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowing giving one (1) or two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product seek medical assistance immediately: take individual to the nearest medical facility.

Inhalation: If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, and dizziness, difficulty in breathing, or is cyanotic, seek a health care professional immediately.

Skin Contact: Wash exposed area with plenty of soap and water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists consult a health care professional.

Eye Contact: Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.

V – FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARD DATA

Flash Point: Closed Cup: >100°C (212°F). (Tagliabue.)

Flammable Limits:

LEL:

UEL:

Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Special Fire-fighting Procedures: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Unusual Fire and Explosion Hazards:

VI – ACCIDENTAL RELEASE MEASURES

Steps To Be Taken In Case Material Is Spilled Or Released: IMPORTANT: before responding to a spill or leak of this product, review each section of this MSDS. Follow the recommendations given in the "Precautions to taken in Handling and

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Storage" section below. Check the "Fire and Explosion Hazard Data" section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of enclosed areas.

Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the products toxicological and chemical properties, and on the size and location of the spill or leak assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. Determine if federal, state, and or local release notification is required (see regulatory classifications section of this MSDS). Recover as much of the pure products as possible into appropriate containers. Later, determine if these recovered products can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that cannot readily be recovered as pure products. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials. Contact the person(s) responsible for the operations of your facility's industrial sewer system prior to intentionally flushing or pumping spills or leaks of this product to the industrial sewer.

VII – HANDLING AND STORAGE

Precautions to Be Taken in Handling and Storage: Eyewash fountains in the work place are recommended. Rubber gloves, safety glasses or goggles and body protective clothing and shoes are required. The handling precautions for this product are based on the characteristics of the neat product unless otherwise specified.

VIII – EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respiratory Protection:

Ventilation:

Local Exhaust:

Mechanical Exhaust:

Other Protective Clothing or Equipment:

Work/ Hygienic Practices:

IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 100°C (212°F)

Vapor Pressure (mm Hg): Not available

Density: 1.15 g/cm³

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Solubility in Water: Easily soluble in cold or hot water.
Appearance and odor: Clear, Pale yellow liquid, mild odor.
Specific Gravity (H₂O=1):
Percent volatile by volume:
Melting Point: <-16°C (3.2°F)
pH (Neat): 7 [Neutral]
pH (100 ppm in water): 6-7
Additional pH information: pH (neat) = 6.0 – 8.0
Evaporation Rate:
Viscosity: Kinetic: 125 cS

X – STABILITY AND REACTIVITY

Stability: Unstable Stable – under normal conditions of use and storage
 Conditions to Avoid:
Incompatibility: Anionic polymers
Hazardous Decomposition Products: Carbon monoxide may be formed upon burning.
Hazardous Polymerization: May Occur Will Not Occur
 Conditions to Avoid:

XI- TOXICOLOGICAL INFORMATION

Acute Toxicity:

Acute Oral (LD50) = 1951 mg/kg male Rat
Acute Oral (LD50) = 2587 mg/kg Female Rat
Acute Oral (LD50) = >2000 mg/kg Rabbit
Acute Oral (LC50) = 2.9 ppm (4 hours) Rat

Target Organ Toxicity: May cause damage to following organs: upper respiratory tract, skin, and eyes.

Reproductive and Development Toxicity:

Carcinogenicity: Not shown as a carcinogen by OSHA, IARC, or NTP. A Two-year rat Carcinogenicity study showed a slight increase in c-cell adenomas in female rats. Studies with male rats and male and female mice did not show any evidence of carcinogenic response. This product is not considered a carcinogen.

Mutagenicity:

Irritant / Sensitization effects:

Slightly hazardous in case of eye contact (irritant).
Slightly hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or occasionally blistering.
Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.

Other: None known

XI I– ECOLOGICAL INFORMATION

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Aquatic Toxicity:

LC50 = 0.26 mg/l 96 hours fathead minnow

LC50 = 0.21 mg/l 96 hours Bluegill sunfish

LC50 = 0.047 mg/l 96 hours Rainbow Trout

LC50 = >600 mg/l 96 hours Sheepshead minnow

LC50 = 13 mg/l 96 hours Mysid shrimp

Avian Toxicity:

LC50 = 0.37 mg/l 48 hours Invertebrate

ENVIRONMENTAL HAZARDS (PR Notice 93-10)

This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water board or Regional Office of the EPA.

XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Follow federal, state and local regulations governing the disposal of waste materials. Contaminated Materials: Determine if the waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management. This product is not specifically listed on 40 CFR 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria of a characteristic hazardous waste under this ACT. Check the characteristics of the material to be disposed of and/or the physical and reactivity data given in this MSDS for the neat product.

Container Disposal: Empty containers, as defined by appropriate sections of the RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.

XIV - TRANSPORTATION DATA

U.S. Department of Transportation - 49 CFR

NOT REGULATED

Proper Shipping Name:

Hazard Class/Division Number:

ID Number:

Packing Group:

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Label Required:
Placard Required:
Marine Pollutant:
Emergency Telephone Number: Chemtrec 800-424-9300

International Maritime Organization - IMDG

Proper Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S., (poly [oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride], Class 9, UN3082, PG III, Marine Pollutant, (EmS No. F-A, S-F, ERG Guide 171, HazMat Code 4960131)

Hazard Class/Division Number: 9
ID Number: UN3082
Packing Group: III
Label Required:
Placard Required:
Marine Pollutant: Yes
Emergency Telephone Number: Chemtrec 202-483-7616 [call collect]

IATA

NOT REGULATED

Unless otherwise stated, the shipping information provided above applies only to non bulk containers of the product. Proper shipping name and general shipping information may vary depending on the packaging and mode of shipment. All products have been properly packaged and labeled according to appropriate hazardous materials shipping regulations. If any alteration of packaging, product, or mode of transportation is further intended, different shipping information, including but not limited to proper shipping name, RQ designation, and labeling may apply.

XV - REGULATORY INFORMATION

The following Regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

SARA (Superfund Amendments and Reauthorizations Act)

SARA 302 Extremely Hazardous Substances List: No components of this product are listed.

SARA 312 Hazard Category: Immediate (Acute) Health Hazard

SARA 313 Toxic Chemicals List: No components of this product are present above the *de minimus* Levels.

TSCA (Toxic Substances Control Act) Applicability

All components may not be listed on the TSCA Inventory. Registered

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pesticides are exempt from the requirements of TSCA.

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

No components of this product are present above the *de minimus* levels.

RCRA (Resource Conservation and Recovery Act) Listed Hazardous Waste

No Components of this product are listed.

CWA (Clean Water Act) Listed Substances

No components of this product are listed.

FDA (Food and Drug Administrations)

This product is not approved for food contact uses.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

The product is a registered pesticide. EPA Reg. No. 1448-114

HMIS/NPCA Rating: Health 1, Flammability 1, Reactivity 0

NFPA Rating: Health 1, Flammability 1, Reactivity 0

State Regulations: Various State Right to Know Acts:

Non-proprietary hazardous chemicals are listed in Section II of this MSDS.

XVI - ADDITIONAL INFORMATION

ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL.

Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section XV of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

The information in this MSDS was obtained from sources, which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.** The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. **FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.** This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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