



FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:	1-800-654-6911 (OUTSIDE USA: 1-423-780-2970)
FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:	1-800-424-9300 (OUTSIDE USA: 1-703-527-3887)
FOR ALL MSDS QUESTIONS & REQUESTS, CALL:	1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: BAQUACIL Performance Algicide
EPA Registration Number: 1258-1272

1. PRODUCT AND COMPANY IDENTIFICATION

Arch Chemicals, Inc. 501 Merritt 7 PO Box 5204 Norwalk, CT 06856-5204	REVISION DATE:	04/24/2009
	SUPERCEDES:	10/30/2002
	MSDS Number:	100000002261
	SYNONYMS:	None
	CHEMICAL FAMILY:	Not Applicable/Mixture
	DESCRIPTION / USE:	algicide
FORMULA:	None established	

2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Mild eye irritant, Mucous membrane irritant
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Routes of Entry:	Inhalation, ingestion, eye contact
Chemical Interactions:	No known interactions
Medical Conditions Aggravated:	None known or reported

Human Threshold Response Data

Odor Threshold	Not established for product.
Irritation Threshold	Not established for product.

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	1	1	0	
NFPA	1	1	0	



Immediate (Acute) Health Effects

Inhalation Toxicity: Not expected to be an inhalation hazard at ambient conditions. Inhalation of mist or vapor may cause irritation to the mucous membranes of the respiratory tract. Not expected to be toxic by inhalation.

Skin Toxicity: Contact would be expected to cause transient redness if not washed off and left on the skin for an extended period of time. Not considered to be a primary skin irritant. Not expected to be toxic from dermal contact.

Eye Toxicity: Contact may cause mild irritation consisting of transient redness, swelling, and mucous membrane discharge to the conjunctiva. No corneal involvement or visual impairment is expected.

Ingestion Toxicity: Slightly toxic if swallowed. Ingestion may cause mild irritation of the gastrointestinal tract and may also cause gastrointestinal discomfort with any or all of the following symptoms: nausea, vomiting or diarrhea.

Acute Target Organ Toxicity: May cause mild eye irritation. Ingestion may cause mild gastrointestinal discomfort.

Prolonged (Chronic) Health Effects

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

Reproductive and Developmental Toxicity: This chemical has been tested in laboratory animals and no evidence of teratogenicity or fetotoxicity was seen.

Inhalation: There are no known or reported effects from chronic exposure except for effects similar to those experienced from acute exposure.

Skin Contact: There are no known or reported effects from chronic exposure.

Skin Absorption: No significant adverse effects to health would be expected to occur.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure.

Eye Contact: Contact would be expected to cause minor irritation, consisting of transient redness and swelling.

Sensitization: This material is not known or reported to be a skin or respiratory sensitizer. A similar product was found to be a negative skin sensitizer in the Guinea pig Buehler method test.

Chronic Target Organ Toxicity: There are no known or reported target organ effects from chronic exposure.

Supplemental Health Hazard Information : No additional health information available.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE	31512-74-0	60 -



4. FIRST AID MEASURES

General Advice:	Call a poison control center or doctor for treatment advice. For 24-hour emergency medical assistance, call Arch Chemical Emergency Action Network at 1-800-654-6911. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Inhalation:	IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Skin Contact:	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.
Eye Contact:	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.
Ingestion:	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.

5. FIRE FIGHTING MEASURES

Flammability Summary (OSHA):	Combustible above 93 deg. C / 200 deg. F.
<u>Flammable Properties</u>	
Flash Point:	> 100 DEG°C / 212 DEG°F
Autoignition Temperature:	No data
Fire / Explosion Hazards:	Material may be ignited only if preheated to high temperatures, for example in a fire.
Extinguishing Media:	Use dry chemical, water fog, carbon dioxide (CO ₂), or foam.
Fire Fighting Instructions:	In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide
Upper Flammable / Explosive Limit, % in air:	No data
Lower Flammable / Explosive Limit, % in air:	No data

6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.
<u>Spill Mitigation Procedures</u>	
Air Release:	Hazardous concentrations in air may be found in local spill area and immediately downwind. Contain all liquids for treatment or disposal.



Water Release: This material is soluble in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so. Contain all liquids for treatment or disposal.

Land Release: Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Contain all liquids for treatment or disposal.

Additional Spill Information : Remove all sources of ignition. Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

7. HANDLING AND STORAGE

Handling: Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing mist or vapor.

Storage: Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Keep from freezing.

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials."
Empty Container Warning: Empty containers retain product residue (liquid and/or vapor) and can be dangerous.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation: No exposure limits exist for the constituents of this product. Additional ventilation beyond that of general exhaust is not normally required.

Protective Equipment for Routine Use of Product

Respiratory Protection : Respiratory protection not normally needed. If vapors, mists or aerosols are generated, wear a NIOSH approved respirator.

Respirator Type : Wear a NIOSH approved N95 respirator.

Skin Protection : Wear impervious gloves to avoid skin contact.

Eye Protection: Use safety glasses with side shields.

Protective Clothing Type: Impervious

General Protective Measures: Emergency eyewash should be provided in the immediate work area.

Exposure Limit Data

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>Name of Limit</u>	<u>Exposure</u>
No Data Found			



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid
Form	clear
Color:	Pale yellow
Odor:	mild
Molecular Weight:	No data
Specific Gravity :	1.15
pH :	6 - 8
Boiling Point:	100 DEG°C / 212 DEG°F
Freezing Point:	-16 DEG°C 3 DEG°F
Melting Point:	No data
Density:	No data
Vapor Pressure:	No data
Vapor Density:	No data
Viscosity:	No data
Fat Solubility:	No data
Solubility in Water:	Soluble
Partition coefficient n- octanol/water:	No data
Evaporation Rate:	No data
Oxidizing:	No data
Volatiles, % by vol.:	No data
VOC Content	No data
HAP Content	No data

10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Stable under normal conditions. Product will not undergo hazardous polymerization.
Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures.
Chemical Incompatibility:	Anionic polymers
Hazardous Decomposition Products:	Carbon monoxide, Carbon dioxide
Decomposition Temperature:	No data

11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE	LD50 (60% Active Ingredient) = 1,951 mg/kg	rat male
POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE	LD50 (60% Active Ingredient) = 2,587 mg/kg	rat female

Dermal LD50 value:

POLY [OXYETHYLENE	LD50 (60% Active Ingredient) > 2,000 mg/kg	rabbit
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(DIMETHYLIMINIO)
ETHYLENE

Inhalation LC50 value:

POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE] LC50 4 h (60% Active Ingredient) = 2.9 ppm rat

Product Animal Toxicity

Oral LD50 value: LD50 1,951 mg/kg rat male LD50 2,587 mg/kg rat female

Dermal LD50 value: LD50 > 2,000 mg/kg rabbit

Inhalation LC50 LC50 4 h = 2.9 ppm rat

value:

Skin Irritation: Contact would be expected to cause transient redness if not washed off and left on the skin for an extended period of time., Not considered to be a primary skin irritant.

Eye Irritation: May cause mild eye irritation.

Skin Sensitization: This material is not known or reported to be a skin or respiratory sensitizer., A similar product was found to be a negative skin sensitizer in the Guinea pig Buehler method test.

Acute Toxicity: May cause mild eye irritation. Ingestion may cause mild gastrointestinal discomfort.

Subchronic / Chronic Toxicity: Not known or reported to cause subchronic or chronic toxicity.

Reproductive and Developmental Toxicity: This chemical has been tested in laboratory animals and no evidence of teratogenicity or fetotoxicity was seen.

Mutagenicity: Not known or reported to be mutagenic. A similar product was tested in a mutagenicity assay and was found to be non-mutagenic under the conditions of the test.

Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE

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

12. ECOLOGICAL INFORMATION

Overview: Highly/very toxic to fish and other aquatic organisms.

Ecological Toxicity Values for: POLY [OXYETHYLENE (DIMETHYLIMINIO) ETHYLENE

Rainbow trout (*Salmo gairdneri*), - 96 h LC50 = 0.047 mg/l
Bluegill sunfish - 96 h LC50 = 0.21 mg/l



Fathead minnow (Pimephales promelas), - 96 h LC50 = 0.26 mg/l
Mysid shrimp - 96 h LC50= 13 mg/l
Daphnia magna, - 48 h LC50= 0.37 mg/l

13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary : If this product becomes a waste, it will be a nonhazardous waste.

Disposal Methods : As a nonhazardous waste, it should be disposed of in accordance with local, state and federal regulations.

Potential US EPA Waste Codes : Not applicable

14. TRANSPORT INFORMATION

Land (US DOT): Not Regulated NOT REGULATED AS A DOT HAZARDOUS MATERIAL
Water (IMDG): NOT REGULATED AS A HAZARDOUS MATERIAL,

Flash Point: 100.00 DEG°C >
Air (IATA): NOT REGULATED AS A HAZARDOUS MATERIAL,
Emergency Response Guide Number: Not applicable

15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): This is an EPA registered pesticide.
EPA Pesticide Registration Number: 1258-1272

FIFRA Listing of Pesticide Chemicals (40 CFR 180): This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):
Health Immediate (Acute) Health Hazard
Physical None



Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Extremely Hazardous Substance Section 302 - Threshold Planning Quantity:

ZUS_SAR302 TPQ (threshold planning quantity) None established

Reportable Quantity (49 CFR 172.101, Appendix):

ZUS_CERCLA Reportable quantity None established
ZUS_SAR302 Reportable quantity None established

Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components

ZUS_SAR313 De minimis concentration None established

Clean Air Act Toxic ARP Section 112r:

CAA 112R None established

Clean Air Act Socmi:

HON SOC None established

Clean Air Act VOC Section 111:

CAA 111 None established

Clean Air Act Haz. Air Pollutants Section 112:

ZUS_CAAHAP None established

ZUS_CAAHRP None established

CAA AP None established

State Right-to-Know Regulations Status of Ingredients

Pennsylvania:

CAS #	COMPONENT NAME
ZUSPA_RTK	None established

New Jersey:

CAS #	COMPONENT NAME
ZUSNJ_RTK	None established

Massachusetts:

CAS #	COMPONENT NAME
ZUSMA_RTK	None established

California Proposition 65:

CAS #	COMPONENT NAME
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ZUSCA_P65

None established

WHMIS Hazard Classification:

None established

16. OTHER INFORMATION

MSDS REVISION STATUS : Revised to meet the ANSI standard of 16 sections
SECTIONS REVISED: First formulated version in SAP.
Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. ARCH CHEMICALS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS MSDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT ARCH CHEMICALS MSDS CONTROL AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT. .