



MATERIAL SAFETY DATA SHEET

Robarb Robacide 60

1. Product And Company Identification	
Supplier Robarb 1400 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States Telephone Number: (770)521-5999 FAX Number: (770)521-5959 Web Site: www.poolspacare.com	Manufacturer Advantis Technologies, Inc. 1400 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States Telephone Number: (770) 521-5999 FAX Number: (770) 521-5959 Web Site: www.poolspacare.com
Supplier Emergency Contacts & Phone Number CHEMTREC - DAY OR NIGHT: (800) 424-9300	Manufacturer Emergency Contacts & Phone Number CHEMTREC - DAY OR NIGHT: (800) 424-9300
Issue Date: 02/13/2006 Product Name: Robarb Robacide 60 Chemical Name: Poly(oxyethylene(Dimethyliminio)Ethylene(Dimethyliminio)Ethylene Dichloride) CAS Number: Not Established Chemical Family: Polymeric Quaternary Ammonium Compound MSDS Number: 4	

2. Composition/Information On Ingredients			
Ingredient Name	CAS Number		Percent Of Total Weight
Poly(oxyethylene(dimethyliminio)Ethylene(dimethyliminio)ethylene dichloride)	31512-74-0		
Ingredients listed in this section have been determined to be hazardous as defined in 29CFR 1910.1200. Materials determined to be health hazards are listed if they comprise 1% or more of the composition. Materials identified as carcinogens are listed if they comprise 0.1% of more or the composition. Information on proprietary materials is available in 29CFR 1910.1200(i)(1).			

3. Hazards Identification
Primary Routes(s) Of Entry Skin Contact, Eye Contact, Inhalation
Eye Hazards Slightly hazardous in case of eye contact (irritant).
Skin Hazards Slightly hazardous in case of skin contact (irritant). Non-sensitizer for skin. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Ingestion Hazards Ingestion is not expected to be a primary route of exposure.
Inhalation Hazards Slightly hazardous in case of inhalation. Effects will depend on concentration and length of time of exposure.
Subchronic (Target Organ Effects) May cause damage to the following organs: upper respiratory tract, skin, eyes.

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3. Hazards Identification - Continued

Chronic/Carcinogenicity Effects

Not tested by the manufacturer. 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.

Signs And Symptoms

Irritation of Eyes and Respiratory Passages

Conditions Aggravated By Exposure

None Known

First Aid (Pictograms)



4. First Aid Measures

Eye

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.

Skin

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 professional.

Ingestion

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

Inhalation

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

Note To Physician

No Specific Antidote is known. Treat Symptoms.

Evaluate Principal Route of Entry, Seek appropriate medical attention. Never give anything by mouth to an unconscious person.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: >212 °F

Flash Point Method: Closed Cup

Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

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6. Accidental Release Measures

Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Avoid release to the environment. Do not flush to sewer.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling Precautions

Avoid contact with eyes. Wash thoroughly after handling. Wash hands before eating, drinking, or smoking.

Storage Precautions

Store in a cool dry place. Keep out of reach of children.

Work/Hygienic Practices

Use safe chemical handling procedures suitable for the hazards presented by this material. Do not contaminate Water Food or Feed by storage or cleaning equipment.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls

Local exhaust acceptable. Special exhaust not required

Eye/Face Protection

Safety glasses with side shields or goggles recommended.

Skin Protection

Chemical-resistant gloves.

Respiratory Protection

General room ventilation is normally adequate.

9. Physical And Chemical Properties

Appearance

Clear, pale yellow liquid

Odor

Mild

Chemical Type: Mixture

Physical State: Liquid

Melting Point: 32 °F <0 °C

Boiling Point: 212 °F >100 °C

Specific Gravity: 1.15 g/cm³

Percent Volitales: Not established

Vapor Pressure: Not established

pH Factor: 6-8

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9. Physical And Chemical Properties - Continued

Odor - Continued

Solubility: Easily soluble in cold/hot water

Viscosity: Kinetic: 125cS

Evaporation Rate: Not established

10. Stability And Reactivity

Stability: Stable under normal conditions of use and storage

Incompatible Materials

Anionic Polymers

Hazardous Decomposition Products

Carbon monoxide may be formed upon burning.

11. Toxicological Information

Skin Effects

Dermal LD50 = >2000 mg/kg Rabbit

Acute Oral Effects

Oral LD50 = 1951 mg/kg Male rat

Oral LD50 = 2587 mg/kg Female rat

Acute Inhalation Effects

Inhalation LD50 = 2.9ppm (4 hours) Rat

12. Ecological Information

Acute Toxicity - Fish And Invertebrates

LC50 = 0.37 mg/L 48 hours Invertebrate

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

13. Disposal Considerations

Refer to applicable local, state and federal regulations as well as industry standards.

14. Transport Information

Proper Shipping Name

Environmentally Hazardous Substance, Liquid, n.o.s.

(Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene dichloride]), Marine Pollutant

Hazard Class

9, PGIII

DOT Identification Number

UN3082

Additional Shipping Paper Description

North American Emergency Response Guide No. 171

Not regulated by DOT for ground or air shipments [see exception for marine pollutants 49CFR171.4(c)].

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15. Regulatory Information

State Regulations

California Proposition 65: This product had been reviewed for Prop 65 components and the following applies:
Warning: This product may contain substance(s) which are known to the State of California to cause cancer or reproductive harm. (Contents may contain trace levels of (<10 ppm) of Dichloroethyl ether, 1,4-Dioxane and (<20 ppb) N-nitrosodimethylamine). Trace contaminants from Poly[oxyethylene(diamethyiminio)ethylene(diethylimino)ethylene dichloride)

NFPA



HMIS

HEALTH	1
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	B

16. Other Information

Revision/Preparer Information

MSDS Preparer: JHW

Reference Documentation

Disclaimer

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Robarb

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