



MATERIAL SAFETY DATA SHEET

Robarb 1 inch Tablets

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: 04/20/2006 Product Name: Robarb 1 inch Tablets Chemical Name: Trichloro-s-Triazine-Trione CAS Number: Not Established Chemical Family: Chlorinated Isocyanurates Chemical Formula: C3N3O3Cl3 MSDS Number: 52	

2. Composition/Information On Ingredients			
Ingredient Name	CAS Number		Percent Of Total Weight
TRICHLOROISOCYANURICACID	87-90-1		
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% or more of the composition. Information on proprietary materials is available in 29CFR 1910.1200(i)(1).			

EMERGENCY OVERVIEW
White granular solid or tablet-form product Oxidizer Corrosive to eyes, skin and mucous membranes. Harmful by inhalation and if swallowed.

3. Hazards Identification
Primary Routes(s) Of Entry Skin Contact, Inhalation Eye Hazards Irritant, severe eye. Skin Hazards Dermal exposure can cause severe irritation and/or burns characterized by redness, swelling, and scab formation. Ingestion Hazards Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration. Ingestion causes

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3. Hazards Identification - Continued

Ingestion Hazards - Continued

severe damage to the gastrointestinal tract with the potential to cause perforation.

Inhalation Hazards

Causes respiratory tract irritation.

Signs And Symptoms

Irritation of Eyes and Respiratory Passages

Conditions Aggravated By Exposure

Asthma, Respiratory and Cardiovascular Disease

First Aid (Pictograms)



4. First Aid Measures

Eye

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.

Skin

In case of contact, immediately flush skin with plenty of water. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

Ingestion

Drink large amounts of water. Avoid Alcohol. Do not induce vomiting. Contact a physician or poison control.

Inhalation

If inhaled, remove to fresh air.

Note To Physician

Corrosive

In case of ingestion DO NOT induce vomiting. No specific antidote. Treat symptomatically and supportively.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: n/a °F

Flammability Class: NOT FLAMMABLE

Fire And Explosion Hazards

SMALL QUANTITIES OF WATER WILL REACT WITH THIS PRODUCT TO FORM HAZARDOUS AMOUNTS OF NITROGEN TRICHLORIDE(VIOLENT EXPLOSIVE)

Extinguishing Media

In case of fire, soak (flood) with water. CAUTION DO NOT USE DRY CHEMICAL CONTAINING AMMONIA COMPOUNDS

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear.

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5. Fire Fighting Measures - Continued

Fire Fighting Instructions - Continued

6. Accidental Release Measures

Clean up spill immediately. Complete cleanup on dry basis if possible. Use appropriate personal protective equipment (PPE). Use appropriate containers to avoid environmental contamination. Spills greater than 100 pounds constitute a reportable quantity by the US EPA

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions

Keep out of reach of children. Store material in a cool and dry place. Do not reuse container

Storage Precautions

Keep out of reach of children. Store in a cool dry place. Do not Reuse container. Keep away from other types of chlorinating compounds and organic material. **KEEP AWAY FROM AMMONIA AND AMMONIA COMPOUNDS.** Do not store above 60C/140F.

Work/Hygienic Practices

Use safe chemical handling procedures suitable for the hazards presented by this material.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate general and local exhaust ventilation.

Eye/Face Protection

Safety glasses with side shields or goggles.

Skin Protection

Chemical-resistant gloves. Wear long sleeves.

Respiratory Protection

Respiratory protection not normally required. A respiratory protection program that meets OSHA 1910.134 must be followed whenever workplace conditions warrant a respirator's use.

9. Physical And Chemical Properties

Appearance

White tablet or stick

Odor

Chlorine

Chemical Type: Mixture

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9. Physical And Chemical Properties - Continued

Odor - Continued

Physical State: Solid
Melting Point: Not applicable °F
Boiling Point: Not applicable °F
Specific Gravity: >1
Molecular Weight: NOT DETERMINED
Vapor Pressure: Not applicable
Vapor Density: Not applicable
pH Factor: 2.7-2.9 At a Concentration Of 1% solution
Evaporation Rate: Not Applicable

10. Stability And Reactivity

Stability: STABLE
Hazardous Polymerization: WILL NOT OCCUR

Conditions To Avoid (Stability)

THERMAL DECOMPOSITION MAY PRODUCE CHLORINE AND OTHER TOXIC GASES

Incompatible Materials

Reducing agents and Oxidizers, Nitrogen containing compounds, Calcium hypochlorite, Alkalies, Acids, Bases

Hazardous Decomposition Products

Chlorine gas

Conditions To Avoid (Polymerization)

Water on product while in container. Humidity

11. Toxicological Information

Eye Effects

Corrosive

Skin Effects

Corrosive

Acute Oral Effects

Rat Oral LD50: 490 mg/kg

Acute Inhalation Effects

Rat inhalation: Approx. 0.68 mg/l/4 hour - (nose only)

Chronic/Carcinogenicity

Not known to be a carcinogen.
Not classified by IARC, OSHA, EPA.
Not included in NTP 10th Report on Carcinogens.

Reproductive Effects

There are no known or reported effects on reproductive function or fetal development. Toxicological investigation indicates it does not effect reproductive function of fetal development.

Mutagenicity (Genetic Effects)

Not mutagenic in five Salmonella strains and one E.coli strain with or without mammalian microsomal activation.

12. Ecological Information

Acute Toxicity - Fish And Invertebrates

96 hour-LC50, Fish: 0.32 mg/l (Rainbow trout)
0.30 mg/l (bluegill sunfish)
96 hour-LC50, Daphnia magna: 0.21 mg/l

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12. Ecological Information - Continued

Acute And Dietary Toxicity - Birds

Oral LD50, Mallard duck: 1600 mg/kg
Dietary LC50, Mallard duck: >10,000 ppm
Dietary LC50, Bobwhite quail: 7422 ppm

13. Disposal Considerations

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

14. Transport Information

Proper Shipping Name

TRICHLOROISOCYANURIC ACID DRY

Hazard Class

5.1, PG II (<=1kg Consumer Commodity ORM-D)


DOT Identification Number

UN2468

15. Regulatory Information

Canadian Regulatory Information

Class C - Oxidizing Material
Class D, Div 2b - Poisonous or Infectious Material: other toxic effects,

NFPA	HMIS								
	<table border="1"><tr><td>HEALTH</td><td>3</td></tr><tr><td>FLAMMABILITY</td><td>0</td></tr><tr><td>REACTIVITY</td><td>2</td></tr><tr><td>PERSONAL PROTECTION</td><td>B</td></tr></table>	HEALTH	3	FLAMMABILITY	0	REACTIVITY	2	PERSONAL PROTECTION	B
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16. Other Information

Revision/Preparer Information

MSDS Preparer: JHW

This MSDS Superceeds A Previous MSDS Dated: 07/26/2000

Disclaimer

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Robarb