

MATERIAL SAFETY DATA SHEET

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: 02/28/2006 Product Name: Robarb Brom Tabs for Pools CAS Number: Not Established Chemical Family: Halogenated Hydantoin MSDS Number: 345				
2. Composition/Information On Ingredients				
Ingredient Name		CAS Number	Percent Of TotalWeight	
BROMOCHLORO-5,5-DIMETHYLHYDANTOIN		32718-18-6		
EMERGENCY OVERVIEW				
White to off-white granular solid with faint halogenou Corrosive Causes irreversible eye damage and skin burns Irritating to nose and throat May be fatal if inhaled Harmful if absorbed through skin or swallowed Oxidizer	is odour			
Hazards Identification (Pictograms)				
3. Hazards Identification				
Primary Routes(s) Of Entry Skin contact, Inhalation, Ingestion, Eye Contact.				
Eye Hazards Corrosive. May cause permanent eye damage.				
Skin Hazards Exposure to wet skin may cause severe irritation. May ca	ause skin sensitization.			

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3. Hazards Identification - Continued

Ingestion Hazards

May be fatal if swallowed.

Inhalation Hazards

Irritant to upper respiratory tract. Shortness of breath, headache and nausea.

Chronic/Carcinogenicity Effects

There are no known chronic hazards.

Conditions Aggravated By Exposure

Existing dermatitis may be aggravated by exposure.

4. First Aid Measures

<u>Eye</u>

Hold eyes 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 advise.

Skin

Take off contaminated clothing. If contact with skin: Brush off excess chmical and flush skin with cold water for at least 15 minutes. Call a poison control center or doctor for treatment advise.

Ingestion

Call a physician or poison control center immediately for treatment advise. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Inhalation

If inhaled: Remove to fresh air. If person is not breathing, call 911 or an ambulance, then give artifical respiration, preferable by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advise.

Note To Physician

Probable mucosal damage may contraindicate the use of gastric lavage.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: None °F Autoignition Point: N/A °F Flammability Class: Not flammable

Fire And Explosion Hazards

Strong oxidizing agent. Forms explosive mixtures with combustible, organic or other easily oxidizable materials. When heated to decomposition, may release poisonous and corrosive fumes.

Extinguishing Media

Dry powder, carbon dioxide or water spray.

Fire Fighting Instructions

Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing appratus in positive pressure mode.

6. Accidental Release Measures

Personal Precautions:

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6. Accidental Release Measures - Continued

Evacuate area. Use dust respirator, rubber gloves and chemical safety goggles.

Methods for Cleaning Up:

Sweep up, place in a suitable container and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Avoid access to streams, lakes or ponds.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling Precautions Keep containers tightly closed.

Storage Precautions

Keep away from all sources of ignition. Recommended storage temperature below 30C. Store in a dry, well-ventilated area away from incompatible materials.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls

Use local exhaust as necessary, especially under dusty conditions. Ventilation must be sufficient to maintain atmospheric concentration below exposure limit (TLV-TWA: 0.1 mg/m3).

Eye/Face Protection

Chemical safety goggles

Skin Protection

Body covering clothes and boots PVC gloves

Respiratory Protection

Approved respirator

Other/General Protection

Do not eat, smoke ro drink where material is handled, processed, or stored. Wash hands carefully before eating or smoking. Safety shower and eye bath should be provided.

9. Physical And Chemical Properties

Appearance

White to off-white tablet

<u>Odor</u>

Faint halogen odor.

Chemical Type: Mixture Physical State: Solid

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9. Physical And Chemical Properties - Continued
Odor - ContinuedMelting Point: N/A °FBoiling Point: N/A °FSpecific Gravity: 1.8-2.0Molecular Weight: 241.5Vapor Pressure: 9.35x10(-3) Pa (25C)Vapor Density: N/ASolubility: 0.22g/100ml in waterEvaporation Rate: N/A
10. Stability And Reactivity
Stability: Stable under normal conditions Hazardous Polymerization: Will not occur
<u>Conditions To Avoid (Stability)</u> Exposure to moisture Heating above decomposition temperature (160C)
Incompatible Materials Oxidizing agents, bases, combustible organic materials
Hazardous Decomposition Products CO, HBr, Cl2, NOx, HCl, CO2
Conditions To Avoid (Polymerization) Will not occur under normal conditions.
11. Toxicological Information
<u>Skin Effects</u> Dermal irritation (rabbit): Corrosive Dermal sensitization (guinea pig): Sensitizer
Acute Oral Effects Oral LD50: 929 mg/kg (rat).
<u>Acute Inhalation Effects</u> Rat Inhalation LC50: 1.1 mg/l/4 hour (powder)
<u>Chronic/Carcinogenicity</u> Not known to be a carginogen. Not classified by IARC. Not included in NTP 10th Report on Carcinogens.
Mutagenicity (Genetic Effects) Mutagenic by the Ames Test Mutagenic in the mouse lymphoma L5178Y test system Non genotoxic in micronucleous test in mice Non genotoxic in in-vivo liver unscheduled DNA synthesis (USD) assay
12. Ecological Information
Acute Toxicity - Fish And Invertebrates 96 Hour-LC50, Fish: 1.2 mg/l (Eastern oyster, Acute flow through) 1.9 mg/l (Mysid shrimp, Acute flow through) 0.4 mg/l (Rainbow trout, Static) 0.46 mg/l (Bluegill sunfish, Static) 1.6 mg/l (Sheepshead minnow, Acute flow through)

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12. Ecological Information - Continued
Acute Toxicity - Fish And Invertebrates - Continued
48 Hour-LC50, Daphnia magna 0.75 mg/l (Static) Acute And Dietary Toxicity - Birds Oral LD50, Bobwhite quail 1839 mg/kg Dietary LC50, Mallard duck >5620 ppm Dietary LC50, Bobwhite quail >5620 ppm
13. Disposal Considerations
Disposal Method: Dispose of in approved landfill sites or an approved incinerator. Crush and bury empty containers. Avoid access to streams, lakes, or ponds. Observe all federal, state, and local environmental regulations when disposing of this material.
Empty Container: Crush and bury empty containers.
14. Transport Information
<u>Proper Shipping Name</u> Oxidizing Solid, n.o.s. (Bromo, Chloro-5,5-DimethylHydantoin)
<u>Hazard Class</u> 5.1, PGII (<=1 kg Consumer Commodity ORM-D)
DOT Identification Number UN1479
DOT (Pictograms)
15. Regulatory Information
<u>U.S. Regulatory Information</u> This product is registered under FIFRA. TSCA: EPA Number P-94-34 Subject to reporting under SNUR (Significant New Use Rule) -any use, 60 FR 11037
SARA Hazard Classes Acute Health Hazard Reactivity Hazard
SARA Section 313 Notification This product does not contain a chemical listed at or above de minimis concentrations.
<u>State Regulations</u> This product or its components are not listed on any California Proposition 65 list of carcinogens or reproductive toxicants.
Other International Regulations EEC No. 251-171-5 Japanese META: ENCS No.:5-6368 China Inventory: Listed Philippines: Listed in PICCS Not listed under CERCLA.
If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have

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15. Regulatory Information - Continued			
Other International Regulations - Continued the following EPA hazardous waste number: D001.			
NFPA HMIS HEALTH 3 FLAMMABILITY 0 REACTIVITY 1 PERSONAL PROTECTION B			
16. Other Information			
<u>Revision/Preparer Information</u> MSDS Preparer: JHW This MSDS Superceeds A Previous MSDS Dated: 03/07/2002			
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