



MATERIAL SAFETY DATA SHEET

GLB Granular

1. Product And Company Identification

Supplier

GLB
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
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
ACEAN - DAY OR NIGHT: (800) 654-6911

Manufacturer Emergency Contacts & Phone Number

CHEMTREC - DAY OR NIGHT: (800) 424-9300
ACEAN - DAY OR NIGHT: (800) 654-6911

Issue Date: 01/09/2009

Product Name: GLB Granular
Chemical Name: Sodium Dichloro-s-triazinetrione dihydrate
CAS Number: Not Established
Chemical Family: Chloroisocyanurates / Swimming pool sanitizer
Chemical Formula: C3N3O3Cl2Na.2H2O
MSDS Number: 416

Synonyms

Sodium Dichlor; Sodium dichloroisocyanurate, dihydrate; Sodium dichloro-s-triazinetrione dihydrate

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
SODIUMDICHLORO-S-TRIAZINETRIONE DIHYDRATE	51580-86-0	

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% or more of the composition. Information on proprietary materials is available in 29CFR 1910.1200(i)(1).

EMERGENCY OVERVIEW

Corrosive to eyes skin and mucous membranes, Lung toxin, Toxic by inhalation (dust)., Oxidizer

3. Hazards Identification

Primary Routes(s) Of Entry

Inhalation, skin, eyes, ingestion

Eye Hazards

CAUSES BURNS TO EYES. Severe irritation and/or burns can occur following eye exposure. Direct contact may cause impairment of vision and corneal damage. Rinsing of the eye should take place immediately.

Skin Hazards

DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET MATERIAL CAUSES SKIN BURNS. Dermal exposure to dry material causes moderate skin irritation characterized by redness and swelling. Dermal exposure to wet material can cause severe irritation and/or burns characterized by redness, swelling, and scab formation.

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3. Hazards Identification - Continued

Skin Hazards - Continued

Prolonged skin exposure may cause permanent damage.

Ingestion Hazards

Harmful if swallowed. **CAUSES BURNS TO DIGESTIVE TRACT.** 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 may cause severe damage to the gastrointestinal tract with the potential to cause perforation.

Inhalation Hazards

HARMFUL IF INHALED. If dust is created and inhaled, inhalation of this material in dust or vapor form is irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory tract with the production of lung edema which can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. Inhalation of high concentrations can result in permanent lung damage. Toxic by inhalation (dust).

Subchronic (Target Organ Effects)

This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to the mucous membranes and respiratory tract. The dry material is irritating to the skin. However, when wet, it will produce burns to the skin.

Chronic/Carcinogenicity Effects

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

Inhalation: Repeated inhalation of dust may cause impairment of lung function and permanent lung damage.

Skin Contact: Effects similar to those from acute exposure. In addition, chronic exposure to wet material may cause effects secondary to tissue destruction.

Ingestion: There are no known or reported effects from chronic ingestion except for effects similar to those experienced from single exposure. The acute corrosivity of this product, makes chronic ingestion of significant amounts unlikely.

Eye Contact: Prolonged contact may result in permanent damage. Corneal involvement or visual impairment is expected.

Sensitization: This material tested negative for skin sensitization in animals.

Chronic Target Organ Toxicity: There are no known or reported target organ effects from chronic exposure. Toxicological investigation indicates it does not produce significant effects from chronic exposure.

Reproductive Effects

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

Conditions Aggravated By Exposure

Asthma, Respiratory and Cardiovascular Disease

No additional health information available.

4. First Aid Measures

Eye

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.

Skin

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.

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4. First Aid Measures - Continued

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.

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.

Note To Physician

Probable mucosal damage may contraindicate the use of gastric lavage.

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.

5. Fire Fighting Measures

Flash Point: N/A °F

Autoignition Point: N/A °F

Flammability Class: NOT FLAMMABLE

Lower Explosive Limit: N/A

Upper Explosive Limit: N/A

Fire And Explosion Hazards

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Strong Oxidizer.

Extinguishing Media

Choose extinguishing media suitable for surrounding materials. Do not use dry extinguishers containing ammonium compounds.

Fire Fighting Instructions

Use water to cool containers exposed to fire. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding large amounts of water may be required before extinguishment can be accomplished. Do not use dry extinguishers containing ammonium compounds. Response to this material requires the use of a full-face (NIOSH approved) self-contained breathing apparatus (SCBA).

Product is not known to be flammable, combustible, pyrophoric or explosive.

6. Accidental Release Measures

Personal Protection for Emergency Situation: Response to a large quantity spill (100 pounds or greater) or when dusting or decomposition gas exposure could occur requires the use of a positive pressure full face supplied air respirator or self contained breathing apparatus (SCBA), chemical resistant gloves, coveralls and boots. In case of fire, this personal protective equipment should be used in addition to normal fire fighter equipment. Compatible materials for response to this material are: neoprene. Protection concerns must also address the following: If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.

Spill Mitigation Procedures

Air Release: Hazardous concentrations in air may be found in local spill area and immediately downwind. Vapors may be suppressed by the use of alcohol foam. Contain all solids for treatment and disposal.

Water Release: This material is soluble in water. Divert water flow around spill if possible and safe to do so. Begin monitoring for available chlorine and pH immediately.

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6. Accidental Release Measures - Continued

Land Release: Do not contaminate spill material with any organic materials, ammonia, ammonium salts or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container. Avoid dust generation. Do not place spill materials back in their original containers.

Additional Spill Information: 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.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling Precautions

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash off with water. Avoid breathing dust from this material.

Storage Precautions

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

Incompatible Materials for Storage: Refer to Section 10, "Incompatible Materials"

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

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to keep airborne exposures below the TLV, PEL or other recommended exposure limit.

Eye/Face Protection

Use chemical goggles.

Skin Protection

Wear impervious gloves to avoid skin contact. A full impervious suit is recommended if exposure is possible to a large portion of the body.

Respiratory Protection

Wear a NIOSH approved respirator if levels above the exposure limits are possible.

A NIOSH approved full-face air purifying respirator equipped with combination chlorine/P100 cartridges. Air purifying respirators should not be used in oxygen deficient or IDHL atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Exposure Limit Data:

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8. Exposure Controls/Personal Protection - Continued

Respiratory Protection - Continued

<u>Chemical Name</u>	<u>CAS#</u>	<u>Name of Limit</u>	<u>Exposure</u>
Sodium dichloro-s-triazinetrione dihydrate	51580-86-0	ARCH-ROEG*	0.5 mg/m3 TWA

*ARCH-ROEG: Arch Recommended Occupational Exposure Guideline

Other/General Protection

An eye wash and safety shower should be provided in the immediate work area.

Protective Clothing Type: Nitrile, Natural rubber, Neoprene (This includes: gloves, boots, apron, protective suit).

9. Physical And Chemical Properties

Appearance

Crystalline powder

Odor

Mild chlorine-like

Chemical Type: Mixture

Physical State: Solid

Melting Point: 240-250 °C

Boiling Point: Not applicable °F

Percent Volatiles: Not applicable

Percent VOCs: Not applicable

Vapor Pressure: Not applicable

Vapor Density: No data

pH Factor: 5.5-7.0 At a Concentration Of 1% solution

Solubility: Soluble

Viscosity: Not applicable

Evaporation Rate: Not Applicable

10. Stability And Reactivity

Stability: STABLE

Hazardous Polymerization: WILL NOT OCCUR

Conditions To Avoid (Stability)

Sparks, open flame, other ignition sources, and elevated temperatures. Avoid high humidity. Contact with incompatible substances

Incompatible Materials

This material is chemically reactive with many substances including, e.g., other pool treatment products, acids, organics, nitrogen-containing compounds, dry powder fire extinguishers (containing mono-ammonium phosphate), oxidizers, corrosive, flammable or combustible materials. (Incompatible materials for packaging: paper, cardboard)

Hazardous Decomposition Products

Nitrogen Trichloride, Chlorine, Carbon Monoxide

Product is an oxidizer. Not sensitive to static discharge. Not sensitive to mechanical shock.

11. Toxicological Information

Eye Effects

Corrosive to eyes

Skin Effects

Dermal LD50 (component):

Sodium dichloro-s-triazinetrione dihydrate LD50 > 2,000 mg/kg Rabbit

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11. Toxicological Information - Continued

Skin Effects - Continued

Dermal LD50 (Product):

LD50 > 2,000 mg/kg Rabbit

DRY MATERIAL CAUSES MODERATE SKIN IRRITATION. WET MATERIAL CAUSES SKIN BURNS.

Negative skin sensitizer, guinea pig - Buehler Method

Acute Oral Effects

Oral LD50 (Component):

Sodium dichloro-s-triazinetrione dihydrate LD50 = 735 mg/kg Rat

Oral LD50 (Product):

LD50 = 735 mg/kg Rat

Acute Inhalation Effects

Inhalation LC50 (Component):

Sodium dichloro-s-triazinetrione dihydrate LC50 1 h (aerosol dust), (Nose Only) Approximately 2.16 MG/L Rat

Sodium dichloro-s-triazinetrione dihydrate LC50 4 h (aerosol dust), (Nose Only) Approximately 0.54 MG/L Rat

Inhalation LC50 (Product):

LC50 1 h (aerosol dust), (Nose Only) Approximately 2.16 MG/L Rat

LC50 4 h (aerosol dust), (Nose Only) Approximately 0.54 MG/L Rat

This product is corrosive to all tissues contacted and upon inhalation may cause irritation to the mucous membranes and respiratory tract.

Subchronic (Target Organ Effects)

There are no known or reported effects from repeated exposure. Toxicological investigation indicates it does not produce significant effects from chronic exposure.

Chronic/Carcinogenicity

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

Teratogenicity (Birth Defects)

See Reproductive Effects

Reproductive Effects

This chemical has been tested in laboratory animals and no evidence of teratogenic or fetotoxic effects was seen.

Mutagenicity (Genetic Effects)

This product was determined to be non-mutagenic in the Ames assay.

12. Ecological Information

Ecotoxicological Information

Highly toxic to fish and other aquatic organisms.

Acute Toxicity - Fish And Invertebrates

(nominal, flow-through) 96 hour-LC50, Fish: 0.22 mg/l (Rainbow trout, *Salmo gairdneri*)

0.28 mg/l (bluegill sunfish)

(nominal static) 48 hour-LC50, *Daphnia magna*: 0.196 mg/l

Acute And Dietary Toxicity - Birds

Oral LD50, Mallard duck: =3,300 mg/kg

Oral LD50, Bobwhite quail: =730 mg/kg

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12. Ecological Information - Continued

Acute And Dietary Toxicity - Birds - Continued

Dietary LC50 8 Days, Mallard duck: >10,000 mg/kg
Dietary LC50 8 Days, Bobwhite quail: >10,000 mg/kg

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 according to U.S. RCRA regulations. Dispose of in accordance with all Local, State, Federal, and Provincial Environmental Regulations.

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

14. Transport Information

Proper Shipping Name

Not Regulated

Hazard Class

Not Assigned

DOT Identification Number

NONE

DOT (Pictograms)



15. Regulatory Information

U.S. Regulatory Information

Toxic Substances Control Act (TSCA): This is an EPA registered product.

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

SARA Hazard Classes

Acute Health Hazard
Fire Hazard

SARA Section 313 Notification

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

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15. Regulatory Information - Continued

State Regulations

US Commonwealth of Pennsylvania - Department of Labor and Industry; Pennsylvania Code Title 34, Labor and Industry Chapter 323:

1990-01-01

1,3,5-Triazine-2,4,6(1H,3H,5H)-Trione, 1,3-dichloro-, Sodium Salt, Dihydrate

US New Jersey Department of Environmental Protection - Bureau of Hazardous Substances New Jersey Right to Know Law, Haardous Substance List [P.L. 1983, C. 315, NJSA 34:5A-1 et seq]:

None established

US The Commonwealth of Massachusetts Department of Public Health; Massachusetts Right-to-Know-Law, The Masschusetts Substance List, 105 CMR 670.000

1991-07-01

Sodium dichloro-s-triazine trionedihydrate

California Proposition 65: None established

NFPA



HMIS

HEALTH	3
FLAMMABILITY	0
REACTIVITY	1
PERSONAL PROTECTION	B

16. Other Information

Revision/Preparer Information

MSDS Preparer: JHW

This MSDS Superceeds A Previous MSDS Dated: 12/10/2008

Disclaimer

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).

GLB