FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC®:

FOR ALL SDS QUESTIONS & REQUESTS, CALL:

1-800-654-6911 (OUTSIDE USA: 1-423-780-2970) 1-800-424-9300 (OUTSIDE USA: 1-703-527-3887) 1-800-511-MSDS (OUTSIDE USA: 1-423-780-2347)

PRODUCT NAME: GLB SMALL 1" TABLETS EPA Registration Number: 7364-57

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Supplier GLB 1400 Bluegrass Lakes Parkway, Alpharetta, GA, 30004 USA

Telephone: +17705215999 Telefax: +17705215959 Web: www.poolspacare.com

Manufacturer Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 United States of America

REVISION DATE: SUPERCEDES:

MSDS Number: SYNONYMS:

CHEMICAL FAMILY: **DESCRIPTION / USE** FORMULA:

00000024533 Trichloroisocyanuric Acid, TCCA, Trichlor None None established None established

05/26/2015

12/02/2010

SECTION 2. HAZARDS IDENTIFICATION

| GHS Classification | | |
|--|---|---------------------------------|
| Oxidizing solids | : | Category 2 |
| Acute toxicity (Oral) | : | Category 4 |
| Acute toxicity (Inhalation) | : | Category 3 |
| Skin irritation | : | Category 2 |
| Serious eye damage | : | Category 1 |
| Specific target organ toxicity - | : | Category 3 (Respiratory system) |
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single exposure

| GHS Label element Hazard pictograms | : | |
|--|---|---|
| Signal word | : | Danger |
| Hazard statements | : | H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H331 Toxic if inhaled. H335 May cause respiratory irritation. |
| Precautionary statements | : | Prevention: P210 Keep away from heat. P220 Keep/Store away from clothing/ combustible materials. P221 Take any precaution to avoid mixing with combustibles. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection. Response: P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. Disposal: P501 Dispose of contents/ container to an approved waste disposal plant. |
| Other hazards | | |

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS OR CHEMICAL NAME TRICHLORO-S-TRIAZINETRIONE <u>CAS #</u> 87-90-1 <u>% RANGE</u> 96 - 100

SECTION 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. |
| Notes to Physician: | Probable mucosal damage may contraindicate the use of gastric lavage. |

SECTION 5. FIREFIGHTING MEASURES

| Flammability Summary (OSHA): | Product is not known to be flammable, combustible or pyrophoric., NFPA Oxidizer Class: Meets the criteria of an NFPA Class 1 Oxidizer |
|--|--|
| Flammable Properties Flash Point: Autoignition Temperature: Fire / Explosion Hazards: | Not applicable Not applicable During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Closed containers may |
| Extinguishing Media: | explode (due to the build up of steam pressure) when exposed to extreme heat. Water only. |

| 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 amounts of water may be required before extinguishment can be accomplished. Do not use dry extinguishers containing ammonium compounds. |
|--|---|
| Upper Flammable / Explosive Limit, % in air: | Not applicable |
| Lower Flammable / Explosive Limit, % in air: | Not applicable |

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal Protection for Emergency Situations: | 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 repirator 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: | Vapors may be suppressed by the use of water fog. |
| Water Release: | This material is heavier than water. This material is soluble in water. Stop water flow or divert water flow around spill if possible and safe to do so. Begin monitoring for available chlorine and pH immediately. |
| 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. |
| Additional Spill Information : | FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC: 1- 800-424-9300 REPORTABLE QUANTITY: Not Applicable (Per 40 CFR 302.4) Hazardous concentrations in air may be found in local spill area and immediately downwind. If spill material is still dry, do not put water directly on this product as a gas evolution may occur. If material is wet, contact 1-800-654-6911 for proper stabilization procedures. Dispose of spill residues per guidelines under Section 13, Disposal Consideration. This material may be neutralized for disposal; you are requested to contact Arch Chemicals at 1-800- 654-6911 before beginning any such procedure. |

SECTION 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 dust, mist, vapor or gas.

| Storage: | Store in a cool dry ventilated location, away from sources of ignition or other incompatible conditions and chemicals. Keep container(s) closed. Avoid creating dusts. |
|--|--|
| Shelf Life Limitations: | Indefinite. Available chlorine loss can be as little as 0.1% per year at ambient temperatures. |
| Incompatible Materials for Storage: | Organic materials, Reducing agents, nitrogen containing materials, oxidizers, Acids, Bases, (Incompatible materials for packaging: paper, cardboard) |
| Do Not Store At temperatures Above: | 0° C |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Ventilation: 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. <u>Protective Equipment for Routine Use of Product</u> | | | |
|---|---|--|--|
| | | | |
| 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 IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit. | | |
| 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. | | |
| Eye Protection: | Use chemical goggles. | | |
| Protective Clothing Type: | Nitrile, Natural rubber, Neoprene (This includes: gloves, boots, apron, protective suit) | | |
| General Protective | An eye wash and safety shower should be provided in the immediate work | | |
| Measures: | area. | | |

Components with workplace control parameters

no data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State: | solid |
|---------------------------------|-----------------------------------|
| Form | Tablet |
| Color: | white |
| Odor: | Sharp, chlorine-like, bleach odor |
| Molecular Weight: | 232.41 g/mol |
| pH : | 2.7 - 3.2 |
| | () 1 g/l (as aqueous solution) |
| Boiling Point: | no data available |
| Melting point/freezing point | Not applicable |
| Density | 1.6 - 1.9 g/cm3 |
| GLB SMALL 1" TABLETS | |
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| Bulk Density: | 1,160 - 1,900 kg/m3 () |
|---|--|
| Vapor Pressure: Vapor Density: Viscosity: Solubility in Water: | no data available Not applicable no data available 12 g/l 77 °F (25 °C) |
| Partition coefficient n- octanol/water: | Not applicable |
| Evaporation Rate: | Not applicable |
| Oxidizing: | None established |
| Volatiles, % by vol.: | Not applicable |
| VOC Content | Not applicable This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489). This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450. |
| HAP Content | Not applicable |

SECTION 10. STABILITY AND REACTIVITY

| Conditions to Avoid: | Sparks, open flame, other ignition sources, and elevated temperatures., Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes., Damp or slightly wet product (will evolve nitrogen trichloride), May be unstable at temperatures above 225 Deg. C (437 Deg. F) |
|-----------------------------------|--|
| Chemical Incompatibility: | organic materials, Oils, Grease, Sawdust, Reducing agents, nitrogen-containing compounds, oxidizers, acids, Bases, Dry fire extinguishers containing ammonium compounds |
| Hazardous Decomposition Products: | Nitrogen trichloride, Chlorine, nitrous oxides, cyanates, Carbon monoxide, Carbon dioxide |
| Decomposition Temperature: | 225 °C |

SECTION 11. TOXICOLOGICAL INFORMATION

| Component Animal Toxicology Oral LD50 value: | | | |
|---|------|-------------|-----|
| TRICHLORO-S- TRIAZINETRIONE | LD50 | = 490 mg/kg | Rat |

<u>Component Animal Toxicology</u> <u>Dermal LD50 value</u>: TRICHLORO-S-LD50 > 2,000 mg/kg Rabbit TRIAZINETRIONE

Component Animal Toxicology Inhalation LC50 value: GLB SMALL 1" TABLETS REVISION DATE : 05/26/2015

| TRICHLORO-S- TRIAZINETRIONE | , | ust), (Nose Only) Approximately ust), (Nose Only) Approximately | 0.54 mg/I Rat 2.16 mg/I Rat | |
|--|--|--|--------------------------------|--|
| Product Animal Toxicity Oral LD50 value: Dermal LD50 value: Inhalation LC50 value: | LD50 = 490 mg/kg LD50 > 2,000 mg/kg LC50 4 h (aerosol dus | t), (Nose Only) Approximately 0.5 | 4 mg/l Rat LC50 1 h Cat | |
| Skin Irritation: | ation: DRY MATERIAL CAUSES MODERATE SKIN IRRITATION., WET MATERIAL CAUSES SKIN BURNS. | | | |
| Eye Irritation: Skin Sensitization: | Corrosive to eyes. Negative skin sensitizer, guinea pig - Buehler Method | | | |
| Acute Toxicity: Subchronic / Chronic Toxicity: | This product is corrosive to all tissues contacted and upon inhalation, may cause irritation to mucous membranes and respiratory tract. The dry material is irritating to the skin. However when wet, it will produce burns to the skin. There are no known or reported effects from repeated exposure., Toxicological investigation indicates it does not produce significant effects from chronic exposure. | | | |
| Reproductive and Not known or reported to cause reproductive or developmental toxicity. | | | | |
| TRICHLORO-S-TRIAZINETRIONE | | Not known or reported to cause reproductive or developmental toxicity. A similar product has been tested and it did not produce teratogenic or fetotoxic effects in laboratory animals. | | |
| Mutagenicity:This product was determined to be non-mutagenic in the Ames assay.TRICHLORO-S-TRIAZINETRIONEThis product was determined to be non-mutagenic in the Ames assay. | | | | |
| Carcinogenicity: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. | | | | |
| TRICHLORO-S-TRIAZINETRIONE | | This chemical is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, or EPA. | | |

SECTION 12. ECOLOGICAL INFORMATION

Overview:

Highly toxic to fish and other aquatic organisms.

| Ecological Toxicity Values - Product: | | |
|---------------------------------------|---|-------------------------------|
| Rainbow trout (Salmo gairdneri), | | 96 h LC50 0.32 mg/l |
| Bluegill sunfish | - | 96 h LC50 0.30 mg/l |
| Daphnia magna, | - | 48 h LC50 0.21 mg/l |
| Mallard duck | - | 8 d Dietary LC50 > 10,000 ppm |
| Mallard duck | - | Acute Oral LD50 1,600 mg/kg |

| Bobwhite quail | - | 8 d Dietary LC50 7,422 ppm |
|----------------|---|----------------------------|
|----------------|---|----------------------------|

Ecological Toxicity Values for: TRICHLORO-S-TRIAZINETRIONE

| Rainbow trout (Salmo gairdneri), Bluegill sunfish | | 96 h LC50 0.32 mg/l 96 h LC50 0.30 mg/l |
|--|---|--|
| Daphnia magna, | - | 48 h LC50 0.21 mg/l |
| Mallard duck | - | 8 d Dietary LC50 > 10,000 ppm |
| Mallard duck | - | Acute Oral LD50 1,600 mg/kg |
| Bobwhite quail | - | 8 d Dietary LC50 7,422 ppm |

SECTION 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 meets the criteria of a hazardous waste as defined under 40 CFR 261 and would have the following EPA hazardous waste number: D001.If this product becomes a waste, it will be a hazardous waste which is subject to the Land Disposal restrictions under 40 CFR 268 and must be managed accordingly.

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

SECTION 14. TRANSPORT INFORMATION

DOT UN number Description of the goods Class Packing group

: 2468
: Trichloroisocyanuric acid, dry
: 5.1
: II
: 5.1
: 140

TDG

Labels

Emergency Response

Guidebook Number

| UN number Description of the goods Class Packing group Labels | : 2468 : TRICHLOROISOCYANURIC ACID, DRY : 5.1 : II : 5.1 |
|--|--|
| IATA UN number Description of the goods Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passenger aircraft) Packing instruction (passenger aircraft) | 2468 Trichloroisocyanuric acid, dry 5.1 II 5.1 562 558 Y544 |
| IMDG-CODE UN number Description of the goods Class Packing group Labels EmS Number 1 EmS Number 2 | : 2468 : TRICHLOROISOCYANURIC ACID, DRY : 5.1 : II : 5.1 : F-A : S-Q |
| Marine pollutant | : yes |

SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

| Signal word | : | DANGER! |
|-------------------|---|--|
| Hazard statements | : | Harmful if swallowed. |
| | | May be fatal if absorbed through skin. |
| | | May be fatal if inhaled. |
| | | Corrosive. Causes irreversible eye damage. |
| | | This pesticide is toxic to fish. |

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

| Massachusetts Right To Know | | |
|-----------------------------|---------------------------|---------|
| | trichloroisocyanuric acid | 87-90-1 |
| Pennsylvania Right To Know | | |
| | trichloroisocyanuric acid | 87-90-1 |
| New Jersey Right To Know | | |
| | trichloroisocyanuric acid | 87-90-1 |
| | | |

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

| TSCA | : This is an EPA registered pesticide. |
|------|--|
| | |

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

SECTIONS REVISED: Major References : First formulated version in SAP. 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.