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: LEISURE TIME BROMINATING GRANULAR

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Advantis Technologies 1200 Bluegrass Lakes Parkway Alpharetta, GA 30004 REVISION DATE: SUPERCEDES:

MSDS Number: SYNONYMS: CHEMICAL FAMILY: DESCRIPTION / USE FORMULA: 00000026425 None Not Applicable/Mixture Swimming pool water treatment Not Applicable/Mixture

05/26/2015

07/29/2013

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Oxidizing solids	:	Category 2
Skin irritation	:	Category 2
Eye irritation	:	Category 2A
Specific target organ toxicity - single exposure	:	Category 3 (Respiratory system)
GHS Label element Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	H272 May intensify fire; oxidiser. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

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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/ sprav.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection. Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: 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	<u>CAS #</u>	<u>% RANGE</u>
SODIUM DICHLORO-S-TRIAZINETRIONE	2893-78-9	80 - 90

SODIUM BROMIDE (NABR)

7647-15-6

SECTION 4. FIRST AID MEASURES

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.
Skin Contact:	Call a poison control center or doctor for further treatment advice. 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.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA):	Product is not known to be flammable, combustible, pyrophoric or explosive.
Flammable Properties	Not applicable
Autoignition Temperature:	No data
Fire / Explosion Hazards:	Strong oxidizer Will release oxygen when heated, intensifying a fire
Extinguishing Media:	Water only. Do not use dry extinguishers containing ammonium compounds.
Fire Fighting Instructions:	In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.
Hazardous Combustion Products:	During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.
Upper Flammable / Explosive Limit, % in air:	No data
Lower Flammable / Explosive Limit, % in air:	No data

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations:	Use the personal protective equipment recommended in Section 8 and a NIOSH approved self-contained breathing apparatus.
Spill Mitigation Procedures Air Release:	Hazardous concentrations in air may be found in local spill area and

Water Release:	This material is soluble in water.Notify all downstream users of possible contamination.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.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.

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 from this material.
Storage:	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."Refer to Section 10, "Incompatible Materials."

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation:	Use local exhaust ventilation to maintain levels below exposure limits.
Protective Equipment for R	<u>Routine Use of Product</u>

Respiratory Protection :	Wear a NIOSH approved respirator if levels above the exposure limits are possible.
Respirator Type :	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.
Eye Protection:	Use chemical goggles. Emergency eyewash should be provided in the immediate work area.
Protective Clothing Type:	Impervious

Components with workplace control parameters

no data available

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	granular
Color:	White
Odor:	Halogen
Molecular Weight:	Not applicable/Mixture
pH :	4 - 5 Aqueous solution
, Boiling Point:	Not applicable
Melting point/freezing	Not applicable
point	
Density:	50 - 60lb/ft ³
_ = = = = = = = = = = = = = = = = = = =	
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Viscosity:	No data
Fat Solubility:	No data
Solubility in Water:	Soluble
Partition coefficient n-	No data
octanol/water:	
Evaporation Rate:	Not applicable
Oxidizing:	Product has oxidizing properties.
Volatiles, % by vol.:	No data
VOC Content	This product does not contain any chemicals listed under the U.S.
Veo eentent	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	No data
	nu uala

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary:	Product will not undergo hazardous polymerization. Stable under normal conditions.
Conditions to Avoid:	High temperatures, Exposure to moist air or water, Contamination
Chemical Incompatibility:	This product 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.
Hazardous Decomposition Products: Decomposition Temperature:	Chlorine, Nitrogen trichloride, Halogens, Carbon oxides No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology
Oral LD50 value:SODIUM BROMIDELD50 = 3,500 mg/kgREVISURE TIME BROMINATING GRANULAR
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<u>Component Animal Toxico</u> <u>Dermal LD50 value</u> : SODIUM BROMIDE (NABR)	llogy LD50 Believed to be > 2,000 mg/kg Rabbit
<u>Component Animal Toxico</u> <u>Inhalation LC50 value</u> : SODIUM BROMIDE (NABR)	No data
Dermal LD50 value: LI Inhalation LC50 value:	D50 = 3,500 mg/kg Rat D50 Believed to be > 2,000 mg/kg Rabbit No data kin contact may cause mild to moderate irritation consisting of transient redness
ar da Eye Irritation: Ex	amage. xpected to be severely irritating. his material tested negative for skin sensitization in animals.
	evere eye irritant ot known or reported to cause subchronic or chronic toxicity.
Reproductive and Developmental Toxicity:	A three-generation reproduction study on the effects of sodium bromide in rats showed that at extremely high oral doses (4,800 mg/kg. and 19,200 mg/kg.) there was a marked decrease in the fertility of both the male and female rats. The effects of bromide on reproduction were reversible upon bromide withdrawal. Macroscopic examination of all pups born during the entire experimental period provided no evidence of birth defects.
Mutagenicity:	Not known or reported to be mutagenic.
Carcinogenicity:	This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

SECTION 12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: SODIUM DICHLORO-S-TRIAZINETRIONE

Lepomis macrochirus (Bluegill - 96 h LC50 = 0.43 mg/l sunfish)

Oncorhynchus mykiss (rainbow trout)	-	96 h LC50 Believed to be approximately 0.45 mg/l				
Pimephales promelas (fathead minnow)	-	96 h LC50 = 0.70 mg/l				
, Daphnia magna (Water flea)	-	48 h EC50Believed to be approximately 0.195 mg/l				
Ecological Toxicity Values for: SODIUM BROMIDE (NABR)						
Pimephales promelas (fathead minnow)	-	(nominal, static). 96 h LC50 = 16,479 mg/l				
Daphnia magna,	-	(·········				
Daphnia magna,	-	(nominal, static). 48 h EC50= 5,800 mg/l				
Green algae (Scenedesmus quadricauda),	-	(nominal, static). 7 day toxicity threshold for mortality = 2,800 mg/l				

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.
Disposal Methods :	As a hazardous solid waste, it must be disposed of in accordance with local, state and federal regulations.
Potential US EPA Waste Codes :	D001

SECTION 14. TRANSPORT INFORMATION

DOT	
UN number	: 2465
Description of the goods	: Dichloroisocyanuric acid salts
Class	: 5.1
Packing group	: 11
Labels	: 5.1
Emergency Response	: 140
Guidebook Number	

TDG

UN number Description of the goods Class Packing group Labels	2465 DICHLOROISOCYANURIC ACID SALTS 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)	 2465 Dichloroisocyanuric acid, salts 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	: 2465 : DICHLOROISOCYANURIC ACID, SALTS : 5.1 : II : 5.1 : F-A : S-Q

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.
		Harmful if absorbed through skin.
		May be fatal if inhaled.
		Corrosive. Causes skin burns.
		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		
	troclosene sodium	2893-78-9
Pennsylvania Right To Know		
	troclosene sodium Sodium bromide	2893-78-9 7647-15-6
New Jersey Right To Know		
	troclosene sodium Sodium bromide	2893-78-9 7647-15-6

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

: The components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

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

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SECTIONS REVISED: Major References :

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.