

**SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION 1**

**Product Name:** Aquamate Concentrated/Stabilized Pool Chlorinating 1" Small Tablets and Maintain Pool Pro 1" Small Tablets  
**Chemical Name:** Trichloro-s-triazinetriene  
**Synonyms:** Trichloroisocyanuric Acid; TCCA; Trichlor, Trichloro-s-triazinetriene  
**Revision Date:** 02/13/2014  
**Formula:** C<sub>3</sub>Cl<sub>3</sub>N<sub>3</sub>O<sub>3</sub>  
**Product ID:** 2700  
**Chemical Family:** Chloroisocyanurate  
**Molecular Weight:** 232.41  
**Type of Product and Use:** Intended for end-use product for disinfectants, sanitizers, fungicides, bactericides and algacides for swimming pools, spas and hot tubs.  
**Supplier:** Clearon Corp  
95 MacCorkle Ave S.W.  
South Charleston, WV 25303  
1-800-811-2327  
**Emergency Telephone:** Chemtrec (800) 424-9300  
Medical (800) 420-9236  
**Sold By:** Baleco Int'l Inc.  
PO Box 11331  
Cincinnati, OH 45211

**SECTION 2 HAZARDS IDENTIFICATION 2**

**GHS classification**

Ox. Sol. 2 H272, May intensify fire; oxidizer.  
Acute Tox. 4, H302 Harmful if swallowed.  
Eye Irrit. 2, H319 Causes serious eye irritation.  
USA: Eye Irrit. 2A, Causes serious eye irritation.  
STOT SE 3, H335 May cause respiratory irritation.  
Aquatic Acute 1, H400- Very toxic to aquatic life.  
Aquatic Chronic 1, H410- Very toxic to aquatic life with long lasting effects.

**Symbols**



**Signal Word:** DANGER

**Hazard statements:**

H272- May intensify fire; oxidizer  
H302- Harmful if swallowed  
H319- Causes serious eye irritation  
H335- May cause respiratory irritation  
H410- Vary toxic to aquatic life with long lasting effects  
EUH301- Contact with acids liberates toxic gas

**Precautionary statements:**

P210- Keep away from heat/sparks/open flame/hot surfaces. – No Smoking  
P221- Take any precaution to avoid mixing with combustibles/other chemicals  
P261- Avoid breathing dust/fumes/gas/mist/vapors/spray

P280- Wear protective gloves/protective clothing/eye protection/face protection  
 P273- Avoid release to environment  
 P391- Collect spillage  
 P301 + P312- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 P330- Rinse mouth  
 P305 + P351 + P338- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Lenses, if present and easy to do. Continue rinsing  
 P337 + P313- If eye irritation persists: Get medical advice/attention  
 P304 + P340- IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P312- Call a POISON CENTER or doctor/physician if you feel unwell  
 P220- Keep/Store away from clothing/ combustible materials  
 P264- Wash hands thoroughly after handling  
 P270- Do not eat, drink or smoke when using this product  
 P271- Use only outdoors or in well-ventilated area  
 P370 + P378- In case of fire: Use water for extinction  
 P405- Store locked up  
 P501- Dispose of contents/container in accordance with national and international requirements

**Potential Environmental Effects:** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**NFPA Ratings** (Scale 0-4) Health = 3, Fire = 0, Reactivity = 2. Special Hazard Warning: OXIDIZER

**HMIS Ratings** (Scale 0-4) Health = 3, Fire = 0, Reactivity = 2.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS 3

Components	CAS No.	Weight %
Trichloroisocyanuric Acid	87-90-1	99

### SECTION 4 FIRST AID MEASURES 4

**Eye contact:** Hold eye open and gently rinse 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 contact:** Remove contaminated clothing. Rinse skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before reuse. Get medical attention immediately.

**Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth, if possible. Call a poison control center or doctor for further treatment advice.

**Ingestion:** 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Most important symptoms and effects, acute or delayed**

**Eye contact:** Severe irritation and/or burns can occur following eye exposure. Contact may cause impairment of vision and corneal damage.

**Skin contact:** Dermal exposure can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Repeated skin exposure may cause tissue destruction due to the corrosive nature of the product.

**Inhalation:** Irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory tract with the production of lung edema that 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 from the corrosive action of the lung.

**Ingestion:** 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 severe damage to the gastrointestinal tract with the potential to cause perforation.

**Note to physician:** Probable mucosal damage may contraindicate the use of gastric lavage. Corrosive. No specific antidote. In case of ingestion DO NOT induce vomiting. Treat symptomatically and supportively.

**Medical conditions aggravated by exposure:** Asthma, respiratory and cardiovascular diseases.

## SECTION 5 FIRE FIGHTING MEASURES 5

**Suitable extinguishing media:** Water. Large amounts of water may be needed and the flow of water should not be stopped until the fire/reaction has stopped.

**Extinguishing media not to be used:** Do not use dry chemical extinguisher containing ammonia compounds.

**Unusual Fire and Explosion Hazards:** When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide and carbon dioxide.

**Fire Fighting Procedure:** Cool containers with water spray. Fire fighters should wear full protective clothing and use self-contained breathing apparatus (SCBA) in positive pressure mode. 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 extinguishments can be accomplished.

## SECTION 6 ACCIDENTAL RELEASE MEASURES 6

**Personal precautions:** For small spills in well-ventilated areas, wear a NIOSH approved half or full-face tight fitting respirator or a loose fitting powered air-purifying respirator equipped with chlorine cartridges. Chemical goggles should be worn when using a half face respirator. In addition to respiratory protection, wear coveralls; chemical resistant gloves; chemical resistant footwear and chemical resistant headgear for overhead exposure.

For clean-up of large spills, or small dry spills in confined areas, wear full-face respirator with chlorine cartridges or a positive pressure supplied air respirator. Additionally, body protection should be impervious clothing, covering entire body to prevent personal contact with this material.

**CAUTION** - 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.

**Environmental precautions:** Prevent entry into sewers and watercourses.

**Methods for cleaning up:** 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.

**In Air:** Vapors may be suppressed by the use of a water fog.

**Water:** This material is heavier than and soluble in water. Stop flow of material into water source as soon as possible. Begin monitoring for available chlorine and pH immediately.

**Soil:** 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.

## SECTION 7 HANDLING AND STORAGE 7

**Handling:** Avoid bodily contact. Do not take internally. Upon contact with eyes or skin, wash off with water.

**Storage:** Store in a dry, cool, well-ventilated area away from incompatible chemicals (see "materials to avoid"). Product has an indefinite shelf-life limitation. Do not store at temperatures above 60°C/140°F. Available chlorine loss can be as little as 0.1% per year at ambient temperatures.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION 8

### Exposure Limits:

Components	ACGIH-TLV Data	OSHA (PEL) Data
Trichloroisocyanuric Acid 87-90-1	Not determined	Not determined

**Ventilation requirements:** Use local exhaust ventilation to minimize dust and chlorine levels where industrial use occurs. Otherwise, ensure good general ventilation.

**Personal protective equipment:**

**Respiratory protection:** When dusty conditions are encountered, wear a NIOSH/OSHA approved full-face respirator equipped with chlorine cartridges for protection against chlorine gas and a dust/mist type prefilter.

**Hand protection:** Neoprene gloves.

**Eye protection:** Use chemical safety glasses to avoid eye contact. Where industrial use occurs, chemical goggles may be required.

**Skin and Body protection:** Body covering clothes and boots.

**Hygiene measures:** Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Safety shower and eye wash should be provided.

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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES 9

<b>Appearance:</b>	White tablet-form product
<b>Odor:</b>	Sharp, chlorine-like bleach odor.
<b>Odor Threshold:</b>	Not determined
<b>pH:</b>	2.7-2.9 (1% solution)
<b>Melting Point/Range:</b>	225-230°C (decomposes).
<b>Boiling Point:</b>	Not applicable (decomposes).
<b>Flash Point:</b>	Not applicable.
<b>Evaporation Rate (ether=1)</b>	Not applicable under standard conditions.
<b>Vapor Pressure:</b>	Not applicable under standard conditions.
<b>Vapor density:</b>	Not applicable under standard conditions.
<b>Solubility:</b>	
- <b>Solubility in Water:</b>	1.2 g/100ml at 25°C
- <b>Solubility in other solvents:</b>	Not available
<b>Auto-ignition Temperature:</b>	Not applicable
<b>Decomposition Temperature:</b>	225°C (437°F)
<b>Viscosity:</b>	No data available
<b>Bulk Density:</b>	Tablets-1.16 to 1.90 g/cc
<b>Specific Gravity:</b>	> 1
<b>Explosive Properties:</b>	Not available
<b>Oxidising Properties:</b>	Oxidiser
<b>Particle Size:</b>	Not available

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## SECTION 10 STABILITY AND REACTIVITY 10

**Reactivity:** Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes.

**Stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Decomposes when heated, releasing poisonous and corrosive fumes.

**Conditions to avoid:** Heating above 225°C (437°F).

**Materials to avoid:** Do not package in paper or cardboard. Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.

**Hazardous decomposition products:** Nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide, carbon dioxide

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## SECTION 11 TOXICOLOGICAL INFORMATION 11

**Likely routes of exposure:** Skin, Inhalation, Eye contact, Ingestion

**Acute toxicity**

Rat Oral LD50: 809 mg/kg

Rabbit Dermal LD50: >2000 mg/kg

Eye Irritation (rabbit): Corrosive

Dermal Irritation (Rabbit): Corrosive

Dermal Sensitization (guinea pig): Not a sensitizer.

**Chronic toxicity:** Prolonged exposure may cause damage to the respiratory system. Chronic inhalation exposure may cause impairment of lung function and permanent lung damage.

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

**Carcinogenicity:** Not classified by IARC, OSHA, EPA. Not included in NTP 12<sup>th</sup> Report on Carcinogens.

**Reproductive toxicity:** There are no known or reported effects on reproductive function or fetal development. Toxicological investigation indicates it does not affect reproductive function of fetal development.

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## SECTION 12

## ECOLOGICAL INFORMATION

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**Aquatic toxicity**

96 Hour-LC50, Fish: 0.32 mg/l (rainbow trout)  
0.30 mg/l (bluegill sunfish)

48 Hour-LC50, Daphnia Magna: 0.21 mg/l

**Avian toxicity**

Oral LD50, Mallard Duck: 1600 mg/kg

Dietary LC50, Mallard Duck: >10,000 ppm

Dietary LC50, Bobwhite Quail: 7422 ppm

**Persistence and degradability:** Expected to be biodegradable (Lit.)

**Bioaccumulative potential:** Not expected to bioaccumulate (Lit.)

**Mobility in Soil:** Expected to be highly mobile in soil (Lit.)

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## SECTION 13

## DISPOSAL CONSIDERATIONS

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**Waste disposal:** Observe all federal, state and local environmental regulations when disposing of this material. If this product becomes waste, it will be a hazardous waste that is subject to the Land Disposal Restrictions under 40 CFR 268 and must be managed accordingly. Care must be taken to prevent environmental contamination from the use of this material.

**Disposal of packaging:** Empty containers should be disposed of in accordance with all the applicable laws and regulations.

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## SECTION 14

## TRANSPORTATION INFORMATION

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**UN Number:** 2468

**DOT:** Proper Shipping Name: Trichloroisocyanuric Acid Dry

**Class:** 5.1 Oxidizing substances

**Label:** Oxidizing Substances (5.1)

**Packing Group:** II

**Emergency Response Guide No:** 140

Note: Certain shipping modes or package sizes may have exceptions from the transport regulations and may be classified as Consumer Commodity and Limited Quantity. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

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## SECTION 15

## REGULATORY INFORMATION

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**USA:** Reported in the EPA TSCA Inventory. This product is registered under FIFRA.

**-EPA Registration Number:** 45458-18

**Emergency Overview in Accordance to EPA Master Label:**

Hazards to humans and domestic animals  
Highly corrosive  
Causes irreversible eye damage or skin burns  
May be fatal if inhaled  
May be fatal if absorbed through skin  
Strong oxidizing agent  
This pesticide is toxic to fish and aquatic organisms.

**Sara (311, 312) Hazard Class:** This product is categorized as an immediate health hazard, and fire and reactivity physical hazard. This product does not contain a chemical listed at or above de minimis concentrations.

**State(s) Listed on Right to Know List Hazardous Substances List:** Massachusetts, New Jersey, and Pennsylvania.

**Waste Classifications:** If this product becomes a waste, it meets the criteria of a hazardous waste as defined under 40CFR 261 and would have the following EPA hazardous waste number: D001.

**Workplace Classification:** This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

## SECTION 16

## OTHER INFORMATION

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**This data sheet contains changes from the previous version in section(s)**

2, 3(REACH), 6(CLR), 10, 11, 12, 14, 15

The information in this safety data sheet should be provided to all who will use, handles, 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. Baleco 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 safety data sheet is more than three years old, you should contact Baleco at The phone number listed in section 1 to make certain that this sheet is current.

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End of Safety Data Sheet