



TIANJIN POOL AND SPA CORPORATION  
2522 S. MALT AVENUE  
COMMERCE, CA 90040

# SAFETY DATA SHEET

Product name POOLINE JUMBO TABS

Revision date **5-19-15**

## SECTION 1 IDENTIFICATION

**Product ID:** POOLINE JUMBO TABS  
**Chemical Name:** Trichloro-S-Triazinetrione  
**Synonyms:** Trichloroisocyanuric acid; TCCA, Trichlor;  
Trichloro-S-Triazinetrione, Symclosene  
**Chemical Formula:** **C3Cl3N3O3**  
**CAS Number:** **87-90-1**

**Product Use:** Sanitizer, disinfectant, algacide for pool/spas,  
Slow Dissolving, Stabilized

**Supplier:** Tianjin Pool & Spa Corporation  
2522 S. Malt Avenue  
Commerce, CA 90040

**Emergency Phone#** INFOTRAC at 800-535-5053

## SECTION 2 HAZARDS IDENTIFICATION

**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

**GHS SIGNAL WORD:** DANGER

**HAZARD PICTOGRAMS:**



**Hazard Statement(s)**

H272 - May intensify fire; oxidizer  
H302 - Harmful if swallowed  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H410 - Very toxic to aquatic life with long lasting effects  
EUH031 - Contact with acids liberates toxic gas  
H302: Harmful if swallowed

**Precautionary Statement(s):**

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P221 - Take any precaution to avoid mixing with combustibles/other chemicals  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P273 - Avoid release to the environment  
P391 - Collect spillage  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell



**SECTION 2 HAZARDS IDENTIFICATION - (CONTINUED)**

**Precautionary Statement(s) Continued:**

- P330 - Rinse mouth
- P305 + P51 + 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 a well-ventilated area
- P370 + P378 - In case of fire: Use water for extinction
- P405 - Store locked up
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
- P501 - Dispose of contents/container in accordance with national and international regulations

**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**

Component	CAS Number	Percent
Trichloro-S-Triazinetrione	87-90-1	99%

**SECTION 4 FIRST - AID MEASURES**

- Eye contact** 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 contact** 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.
- 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 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.



## SECTION 4 FIRST - AID MEASURES (CONTINUED)

- 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

- 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 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 extinguishment can be accomplished.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal precautions** For small spills in a well-ventilated areas, wear a NIOSH approved half-face 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 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.



**Section 6 Accidental release measures (Continued)**

Environmental precautions  
 Methods Prevent entry into sewers and watercourses 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.

- 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.

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

- Air Vapors may be suppressed by the use of water fog.

**SECTION 7 HANDLING AND STORAGE**

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

Storage Store in a dry, cool, well-ventilated area away from incompatible materials (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**

Compon	ACGIH-TLV Data	OSHA (PEL) Data
Trichloroisocyanuric Acid	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 full-face respirator with chlorine cartridges for protection against chlorine gas and dust/mist pre-filter.
- **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 thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.



## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White granules or 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/range</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>	
- Solubility in water	1.2 g/100ml at 25°C
- Solubility in other solvents	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>	Granular - 0.89-1.1 g/cc Tablet - 1.16-1.9 g/cc
<b>Specific gravity</b>	>1
<b>Explosive properties</b>	Not available
<b>Oxidising properties</b>	Oxidizer
<b>Particle size</b>	Not available

## SECTION 10 STABILITY AND REACTIVITY

<b>Reactivity</b>	Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes.
<b>Stability</b>	Stable under normal conditions
<b>Possibility of hazardous reactions</b>	Decomposes when heated, releasing poisonous and corrosive fumes.
<b>Conditions to avoid</b>	Heating above 225°C (437°F).
<b>Materials to avoid</b>	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.
<b>Hazardous decomposition products</b>	Nitrogen trichloride, chlorine, nitrous oxides, cyanates, carbon monoxide, carbon dioxide

## SECTION 11 TOXICOLOGICAL INFORMATION

<b>Likely Routes of Exposure</b>	Skin Inhalation Eye contact Ingestion
<b>Acute toxicity:</b>	
- Rat oral LD50	809 mg/kg
- Rabbit dermal LD50	>2000 mg/kg



**SECTION 11 TOXICOLOGICAL INFORMATION (CONTINUED)**

- Eye irritation (rabbit)	Corrosive
- Dermal irritation (rabbit)	Corrosive
Dermal sensitization	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 12th 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 or fetal development.

**SECTION 12 ECOLOGICAL INFORMATION**

**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.)

Germany, water endangering classes (WGK)	3
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**SECTION 13 DISPOSAL CONSIDERATIONS**

<b>Waste disposal</b>	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.
<b>Disposal of Packaging</b>	Empty containers should be disposed of in accordance with all applicable laws and regulations





## SECTION 14 TRANSPORT INFORMATION

UN No. 2468

**DOT** Proper shipping name: Trichloroisocyanuric Acid Dry  
Class: 5.1 - Oxidizing substances  
Label: Oxidizing substances (5.1)  
Packing Group: II  
Emergency 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.

**IMDG** Proper shipping name: Trichloroisocyanuric Acid Dry  
Class: 5.1 - Oxidizing substances  
Label: Oxidizing substances (5.1)  
Packing Group: II  
Mark: MARINE POLLUTANT

**ICAO/IATA** Proper shipping name: Trichloroisocyanuric Acid Dry  
Label: Oxidizing substances (5.1)  
Class: 5.1  
Packing group: II  
Marking: Environmentally hazardous substance

## SECTION 15 REGULATORY INFORMATION

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

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**- Emergency overview in accordance to EPA Master Label** DANGER  
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)** 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.

**- Massachusetts Right-to-Know Hazardous Substances list** Listed



## SECTION 15 REGULATORY INFORMATION (CONTINUED)

- New Jersey Right-to-Know Hazardous Substances list	Listed
- Pennsylvania Right-to-Know Hazardous Substances list	Listed
- Waste Classifications	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.
- Workplace Classification	This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).
Canada	Listed in DSL
-WHMIS hazard class	C oxidizing materials D1B Toxic material causing immediate and serious toxic effects D2B Toxic materials causing other toxic effects
EU	Reported in EINECS
EC	No. 201-782-8
Japan	ENCS no. 5-1044 ISHL no. 5-1044
Australia	Listed in AICS
New Zealand Inventory	Listed in NZIoC
China - China inventory	Listed in IECSC
Mexico	Listed in the National Inventory of Chemical Substances (INSQ).
Korea	Listed in the Korea Existing Chemicals Inventory (KECI), number KE-34101
Philippines	Listed in PICCS

## SECTION 16 OTHER INFORMATION

### DATE OF PREPARATION

**5-19-2015**

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