

BIOTROL 355**1 PRODUCT AND COMPANY IDENTIFICATION**

Product Identifier: BIOTROL 355
Common Name: Tributyltetradecyl Phosphonium Chloride
SDS Number: 0441
Revision Date: 4/22/2015
Version: 1
Internal ID: 300D
Product Use: Cooling Water Biocide
Supplier Details: U. S. Water Services
12270 43rd St. NE
St. Michael, MN 55376

Contact: Non-emergency #: 866-663-7632
Email: SDS@uswaterservices.com
Web: www.uswaterservices.com

EMERGENCY RESPONSE: (ChemTel)
US & Canada: 800-255-3924
International: +01-813-248-0585

2 HAZARDS IDENTIFICATION**Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):**

Environmental, Hazards to the aquatic environment - Chronic, 2
Health, Acute toxicity, 2 Inhalation
Health, Skin corrosion/irritation, 1 B

GHS Label elements, including precautionary statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:

**GHS Hazard Statements:**

H411 - Toxic to aquatic life with long lasting effects
H330 - Fatal if inhaled
H314 - Causes severe skin burns and eye damage

GHS Precautionary Statements:

P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P284 - Wear respiratory protection.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if

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present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.

Hazards not otherwise classified (HNOC) or not covered by GHS

3 COMPOSITION/INFORMATION ON INGREDIENTS**Ingredients:**

Cas#	%	Chemical Name
81741-28-8	5-10%	Tributyltetradecyl Phosphonium Chloride

4 FIRST AID MEASURES

- Inhalation:** Remove from contamination. If person has stopped breathing administer artificial respiration. Seek medical attention.
- Skin Contact:** Wash off with soap and plenty of water. Remove contaminated garments and wash or destroy. Seek medical attention if irritation develops.
- Eye Contact:** Flush eyes with plenty of running water for at least 15 minutes. Seek medical attention.
- Ingestion:** If conscious, give plenty of water. Do not induce vomiting. Seek medical attention.

Most important symptoms & effects (acute & delayed): No data available

Indication of need for immediate medical attention: No data available

Special treatment needs: Probable mucosal damage may contraindicate the use of gastric lavage

5 FIRE FIGHTING MEASURES

- Flammability:** Nonflammable
- Flash Point:** None
- Flash Point Method:** Pensky-Martens Closed Cup
- Burning Rate:** No data available
- Autoignition Temp:** No data available
- LEL:** No data available
- UEL:** No data available

Extinguishing Media:

Suitable: Carbon dioxide, foam, dry chemical, sand, dolomite, water spray, fog or mist. Use extinguishing media suitable for surrounding fire.

Unsuitable: No information available

Hazardous combustion products: Hazardous decomposition products formed under fire conditions- Carbon oxides, oxides of phosphorus, chlorine

Unusual Fire or Explosion Hazards: None known

Special protective equipment/precautions: Wear self-contained breathing apparatus

BIOTROL 355**6 ACCIDENTAL RELEASE MEASURES**

Personal Precautions, Protective equipment, emergency procedures: Avoid contact with the material. See section 8 of SDS for PPE recommendations

Environmental Precautions: Keep runoff from entering drains or waterways

Spill/Leak procedures: Contain spill or leak. Dike area if necessary to prevent spill from spreading or entering sewers and waterways. Recover as much as possible then absorb remainder with inert material. Place into closed container for disposal. Absorb in vermiculite, dry sand or earth.

Regulatory Requirements: Dispose of recovered material in accordance with all applicable state and federal regulations.

7 HANDLING AND STORAGE

Handling Precautions: Avoid contact with eyes, skin, or clothing. Do not taste or swallow. Do not inhale vapor or mist. Use with adequate ventilation. For industrial use only!

Storage Requirements: Store in closed containers away from temperature extremes and incompatible materials. Protect from freezing and direct sunlight. Keep separate from food, feedstuffs, fertilizers and other sensitive material. Store away from alkalis and reducing agents. Store in properly labeled containers in accordance with all local, state and federal guidelines.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide local exhaust ventilation as needed to control misting.

Personal Protective Equipment: HMIS PP, D | Face Shield and Eye Protection, Gloves, Apron

Respiratory protection: If needed use MSHA/NIOSH approved respirator. Seek professional advice prior to respirator selection and use. Follow all requirements of OSHA respirator regulations (29 CFR 1910.134)

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132)

Exposure Limits:

OSHA (TWA)/PEL): Not Established

ACGIH (TWA/TLV): Not Established

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless

Physical State: Liquid

Odor Threshold: No data available

Particle Size: No data available

Spec Grav./Density: 8.17 Lb/Gal

Viscosity: No data available

Odor: Slight

Solubility: Complete

Freezing/Melting Pt.: No data available

Flash Point: None

Vapor Density: No data available

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Boiling Point: 100 @ 760 mm Hg
Partition Coefficient: No data available
Vapor Pressure: No data available
pH: 6 - 8
Evap. Rate: No data available
Decomp Temp: >300°C

Auto-ignition Temp: No data available
UFL/LFL: No data available

10**STABILITY AND REACTIVITY**

Chemical Stability: Product is stable under normal storage and use conditions.
Conditions to Avoid: Avoid temperature extremes. Protect from freezing. Avoid excess heat for long periods of time.
Materials to Avoid: Strong alkalis, strong reducing agents
Hazardous Decomposition: Fire creates toxic gases/vapors/fumes of: Carbon monoxide, carbon dioxide, oxides of phosphorus, chlorine.
Hazardous Polymerization: Will not occur.

11**TOXICOLOGICAL INFORMATION**

Acute Toxicity:
Oral (Rat) LD₅₀: >2,000mg/kg
Ipr (Rat) LD₅₀: >4,000mg/kg
Toxic by inhalation. LC₅₀ = 0.9mg/L. Administered as a liquid aerosol for a single 4hr nose only exposure to rats
Skin Corrosion/Irritation: No data available
Serious eye damage/irritation: No data available
Respiratory or skin sensitization: No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive Toxicity: No data available
Specific target organ toxicity (single exposure): No data available
Specific target organ toxicity (repeated exposure): No data available
Aspiration hazard: No data available

12**ECOLOGICAL INFORMATION**

Aquatic Toxicity This product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.
Elimination (persistence & degradability): No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Other adverse effects: No data available

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13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

This material should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14 TRANSPORT INFORMATION

UN2922, Corrosive liquids, toxic, n.o.s., 8,(6.1), PGII, (Tributyltetradecylphosphonium Chloride)

Certain shipping modes or package sizes may have exceptions from the transport regulations. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

DOT Transportation data (49 CFR 172.101)

See section 15 for information on Reportable Quantity chemicals (RQ)

15 REGULATORY INFORMATION

TSCA: All components of this product are listed (or are not required to be listed) in the TSCA inventory
REGULATORY KEY DESCRIPTIONS

TSCA = Toxic Substances Control Act

EPA / CERCLA / SARA TITLE III:

CERCLA List: This product does not contain any CERCLA listed hazardous substances.

Toxic Chemical List (SARA 313): This product does not contain any chemicals subject to routine annual toxic chemical release reporting.

Extremely Hazardous Substance (SARA 302/304): This product does not contain any extremely hazardous substances subject to emergency planning requirements.

SARA 312: No data available

California Proposition 65: This product does not contain any chemicals known to the state of California to cause cancer, birth defects, or any other reproductive harm.

RCRA: Corrosive, D002

BIOTROL 355**16****OTHER INFORMATION**

HMIS III: Health = 3, Fire = 0, Physical Hazard = 0
HMIS PPE: D - Face Shield and Eye Protection, Gloves, Apron

HMIS	
HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	D

Author: U.S. Water Services

Revision Notes: Updated to GHS format

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