



WATER TREATMENT SERVICES, INC.

P.O. BOX 235
WENDEL, PA 15691

For 24 hour emergency service contact INFOTRAC at 800-535-5053
For additional information contact 724-396-2542

Safety Data Sheet

WTSCT-324

1. IDENTIFICATION

Product name	WTSCT-324
Description	Proprietary aqueous solution
Product class	Boiler Water
Supplier address	P.O. Box 60240 Rossford, OH 43460
Telephone numbers	
<u>Company Phone Number</u>	
<u>Emergency Telephone</u>	INFOTRAC 800-535-5053

2. HAZARDS IDENTIFICATION

Hazard classification	Skin Corrosion, Category 1 Serious Eye Damage, Category 1 Carcinogenicity, Category 1B (Inhalation)
Signal word	Danger
Hazard statements	Causes severe skin burns and eye damage. Causes serious eye damage. May cause cancer if inhaled.

Pictograms of related hazards



Precautionary statements

Prevention

- Do not breathe fumes, mist, vapors, or spray.
- Wash skin thoroughly after handling.
- Wear protective gloves, protective clothing, eye protection, and face protection.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.

Response

Wash contaminated clothing before reuse.

Specific measures:

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately contact a POISON CENTER or health care provider.

IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or emergency shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately contact a POISON CENTER or health care provider.

IF exposed or concerned: Get medical attention.

Storage

Store locked up.

Store in a closed container.

Disposal

Dispose of in accordance with local, state, and federal regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %
2-Phosphono-1,2,4-butanetricarboxylic acid (PBTC)	37971-36-1	1-10
Benzotriazole	95-14-7	1-10
Sulfuric acid	7664-93-9	<2
Non-hazardous substances	Proprietary	>80

4. FIRST-AID MEASURES**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally to ensure complete rinsing. Remove contact lenses if present and easy to do, then resume rinsing. Get medical attention immediately.

Skin contact

Immediately remove all contaminated clothing. Rinse with copious amounts of water; use an emergency shower if available. Wash contaminated clothing before reuse.

Ingestion

If swallowed, DO NOT induce vomiting. Rinse mouth and get emergency medical attention. Do not give anything by mouth unless instructed to do so by a poison center or health care provider.

Inhalation

If inhaled, move victim to fresh air. Seek emergency medical attention if breathing is difficult; perform artificial respiration if breathing stops.

Note to health care provider

Esophageal corrosion may contraindicate the use of gastric lavage and/or activated charcoal.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water spray, foam, dry chemical, carbon dioxide
Unsuitable extinguishing media	No information available
Protective equipment and precautions for firefighters	Exercise caution when fighting any chemical fire. A self-contained breathing apparatus and protective clothing are essential. Use water to keep fire-exposed containers cool.
Specific hazards	Reaction with metals may evolve highly flammable hydrogen gas. Combustion may produce toxic gases.
Hazardous combustion products	Carbon oxides, nitrogen oxides, sulfur oxides, phosphorous oxides, corrosive vapor

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Evacuate the area of all non-essential personnel. Do not touch spilled material without proper protective equipment. Ventilate the area and mitigate further release if it is safe to do so. Avoid contact with eyes.
Methods for clean-up	
<u>Small spills</u>	Contain spill and soak up with an inert absorbent material and place residues in a properly labeled container for disposal. Avoid discharge into sewer or surface water.
<u>Large spills</u>	Contain spill using trenches, diking, or absorption with an inert material (i.e. sand or earth). Reclaim spilled material into recovery or salvage drums or tank truck for proper disposal.

7. HANDLING AND STORAGE

Advice on safe handling	Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Wash hands thoroughly after handling.
Storage conditions	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Suitable materials of construction	Corrosion-resistant container; original container only is recommended.
Unsuitable materials of construction	Metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/face protection	Chemical splash goggles, face shield
Skin protection	Chemical-resistant gloves and body-covering clothing
Respiratory protection	NIOSH approved respirator in accordance with OSHA respiratory protection requirements (29 CFR 1910.134) if airborne concentrations exceed published exposure limits.

Engineering controls Adequate ventilation, eye-wash station, and emergency shower

General hygiene considerations Do not eat, drink, or smoke while handling this product.

Chemical Name	OSHA PEL	ACGIH TLV
2-Phosphono-1,2,4-butanetricarboxylic acid (PBTC)	None established	None established
Benzotriazole	None established	None established
Sulfuric acid	1 mg/m ³	0.2 mg/m ³
Non-hazardous substances	None established	None established

9. PHYSICAL AND CHEMICAL PROPERTIES

pH	1.2-2.0
Appearance	Clear colorless liquid
Odor	Mild to no odor
Odor Threshold	No information available
Melting/freezing point	No information available
Initial boiling point/boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	No information available
Vapor density	No information available
VOC content	No information available
Specific gravity	1.100-1.180
Solubility	Complete
Partition coefficient n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available

10. STABILITY AND REACTIVITY

Chemical stability Stable under normal conditions of storage and handling.

Hazardous polymerization Polymerization will not occur.

Conditions to avoid Extreme temperatures, incompatibilities

Incompatibilities	Strong bases, oxidizers
Hazardous decomposition products	No known non-thermal decomposition hazards.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure Skin, eyes, ingestion

Acute toxicity

Test Material	Parameter	Result
2-Phosphono-1,2,4-butanetricarboxylic acid (PBTC)	LD ₅₀ , Oral (rat)	>4,000 mg/kg
	LC ₅₀ , Inhalation (rat)	1,979 mg/m ³ /4hr
	Draize, Skin (rabbit)	Not irritating
	Draize, Eye (rabbit)	Moderately irritating
Benzotriazole	LD ₅₀ , Oral (rat)	560 mg/kg
Sulfuric acid	LD ₅₀ , Oral (rat)	2,140 mg/kg
	LC ₅₀ , Inhalation (rat)	510 mg/m ³
	Draize, Skin (rabbit)	Extreme corrosion; tissue destruction
	Usual Fatal Dose (Human)	20-30 ml

Acute symptoms and effects

Eye	Severe eye irritation with serious damage including, but not limited to, tissue destruction, corneal opacification, and temporary or permanent blindness.
Skin	Skin irritation with or without pain, burning, itching, redness, and swelling. Symptoms may be exacerbated by open wounds, excoriations, rashes, or other skin breaches.
Ingestion	Gastrointestinal distress with or without nausea, vomiting, and diarrhea. May cause irritation or corrosion of the oral and esophageal mucosa.
Inhalation	Upper respiratory irritation with or without cough, watering of the eyes, and postnasal drip. Aspiration of liquid or vomit may cause severe respiratory distress, airway corrosion, and acute lung damage.
Reproductive effects	No information available
Teratogenicity	No information available
Mutagenicity	No information available
Embryotoxicity	No information available
Sensitization to product	No information available
Synergistic products	No information available

Carcinogenicity Sulfuric acid is a suspected human carcinogen when present in inorganic mists. Solutions of sulfuric acid have not been explicitly classified as carcinogenic.

Chronic No information available

12. ECOLOGICAL INFORMATION

Test Material	Parameter	Result
Sulfuric acid	96 hr LC50, Mosquito fish	42 mg/L
	48 hr EC50, Daphnia magna	29 mg/L

Persistence No information available

Bioaccumulative potential No information available

Mobility No information available

13. DISPOSAL CONSIDERATIONS

Disposal Dispose of in accordance with federal, state, and local regulations.

RCRA status As sold, discarded product would be considered a RCRA hazardous waste based on the corrosive characteristics. The EPA hazardous waste number is D002.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT)

UN Number UN3264

Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (contains sulfuric acid)

Primary hazard class/division 8

Secondary hazard None

Packing group III

Label Corrosive

15. REGULATORY INFORMATION

OSHA Hazard Communication Status Skin Corrosion, Category 1
Serious Eye Damage, Category 1
Carcinogenicity, Category 1B (Inhalation)

EPA Registration Number Not applicable

TSCA The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA

EPA Hazardous Substances (40 CFR 302)

Chemical Name	CERCLA Reportable Quantity (RQ)
2-Phosphono-1,2,4-butanetricarboxylic acid (PBTC)	None
Benzotriazole	None
Sulfuric acid	1,000 lb
Non-hazardous substances	None
Product	50,000 lb (Notify the EPA of spills exceeding this amount.)

SARA Title III (Sections 302, 311, 312, and 313)

Section 302 Extremely Hazardous Substances (40 CFR 355)

Chemical Name	CAS#	RQ	TPQ
Sulfuric acid	7664-93-9	1,000 lb	1,000 lb

Section 311 and 312 Health and Physical Hazards

Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	No	No	No

Section 313 Toxic Chemicals (40 CFR 372)

Chemical Name	CAS Number	Percent by Weight
Sulfuric acid	7664-93-9	<2

16. OTHER INFORMATION

HMIS Ratings	Health—3; Flammability—0; Reactivity—0
NFPA Ratings	Health—3; Flammability—0; Reactivity—0; Special Hazard—None
HMIS and NFPA Rating Scale	Minimal—0; Slight—1; Moderate—2; Serious—3; Severe—4
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