

# CHLORINE BROMINE REDUCER

**Product Name:** CHLORINE/BROMINE REDUCER

**Chemical Family:** Inorganic compounds    **Chemical Name and Synonyms:** Sodium Thiosulfate

**Suppliers Name:** Commercial Pool & Spa Supplies, Inc.

1167 East Hwy 36  
Maplewood, MN 55109

**Suppliers Phone Number:** 651-766-6666

**Transportation Emergency Phone Number:** 1-800-535-5053

**S.A.R.A. Information:**

**Hazards:** Acute

**Physical Data:** Pure Solid

## Hazardous Ingredients

**Ingredient:** Sodium Thiosulfate

**CAS#:** 7772-98-7

**Max % W/W:** 100.0

**SARA Applies:** 312: Y 313: N 372: N

**Air Containment Levels:**

**Particulates Not Otherwise Regulated:**

Total TWA                    15 mg/m<sup>3</sup> OSHA

Total TLV                    10 mg/m<sup>3</sup> ACGIH

Respirable TWA            5 mg/m<sup>3</sup> OSHA

## Health Hazards

**Potential Effects of Exposure:**

**Eyes:** Eye contact with product may cause irritation burns.

**Skin:** Skin contact may cause irritation.

**Inhalation:** Inhalation may cause irritation.

**Ingestion:** Ingestion may cause vomiting.

**Target Organs:** Overexposure may cause damage to, disorders of, or adversely affect the following systems, functions, organs: None Known

**First Aid:**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, while holding eyelids apart to ensure flushing of entire surface. Call a physician.

**Skin:** Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Thoroughly clean clothing and shoes before reuse. Call a physician.

**Inhalation:** Remove to fresh air. If not breathing give artificial respiration, preferably mouth to mouth. If breathing is difficult give oxygen. Call a physician.

**Ingestion:** if swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person. Call a physician.

**Other Information:**

**Routes of Entry:** Eye contact, skin contact, inhalation and ingestion.

Overexposure may aggravate disorders of the respiratory system and skin.

## Special Protection

**Protective Equipment:**

**Eyes:** Chemical goggles. Always wear eye protection when working with chemicals. Do not wear contact lenses when working with chemicals.

**Skin:** Clean body covering clothing, impervious gloves and safety helmet.

**Inhalation:** If exposure limits are exceeded, or if exposure may occur, use a NIOSH/MSHA respirator approved for your conditions of exposure. Refer to the most recent NIOSH publications concerning chemical hazards, or consult your safety equipment supplier. Respiratory protection programs must be in compliance with OSHA requirements in 29 CFR 1910.134. For emergencies, a NIOSH/MSHA approved positive pressure breathing apparatus should be readily available.

**Ventilation Required:** Adequate ventilation is required to minimize exposure or to maintain exposure levels below OSHA/ACGIH requirements. Local mechanical ventilation may be required.

**Additional Protective Measures:** Safety shower, eye wash fountain, and washing facilities should be readily available.

## Fire and Explosion Hazard Data

Flash Point (method): > or = NA

Flammable Limits (% by Volume in Air): UPPER: N/D LOWER: N/D

### HMIS Info:

Health: 2            React: 1  
Fire: 0             Special: X

**Extinguishing Media:** Media appropriate for surrounding fire.

**Fire Fighting Procedures:** Prevent human exposure to fire, fumes, smoke, and products of combustion. Evacuate non-essential personnel. Firefighters should wear full face, self-contained breathing apparatus and impervious protective clothing. Use water to cool containers exposed to fire.

**Unusual Fire and Explosion Hazards:** Toxic fumes may be released.

## Physical Data

**Boiling Point:** N/D

**Freezing Point:** 118°F

**Specific Gravity (H<sub>2</sub>O=1):** > or = 1.6700 @ 68°F

**Vapor Pressure (mm Hg):** N/D

**Vapor Density (Air=1):** N/D

**Evaporation Rate:** NA

**Solubility in Water:** 33%

**Percent Volatile by Volume:** N/D

**pH:** aqueous approx. > or = 8.000

**Appearance:** Solid – Powder, crystal, flake, granule, prill, rice

**Odor:** NIL

## Reactivity Data

**Stability:** Stable

**Incompatibility:** Bleaching agents (oxidizers), inorganic acids. Avoid contact with bleaching agents and oxidizers which include chlorine, oxygen, permanganates, perchlorates, percarbonates, peroxides, chromates, hypochlorites, nitric acid, and sulfuric acid.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide and oxides of sulfur.

**Hazardous Polymerization:** Will not occur.

## Spill and Leak Procedures

### Steps to be Taken in Material is Released or Spilled:

Evacuate non-essential personnel, eliminate ignition sources, and wear protective equipment (See Sec.3). Shut off source of leak only if safe to do so. Contain spill. Recover free product. To clean up residue, flush sparingly with water or use and absorbent. Avoid runoff to ground water, surface waters, and sewers. It may be necessary to remove contaminated soil. If product is flammable or combustible, use non-sparking tools. If acidity (low pH) is a problem, neutralize with hydrated lime, soda ash, or sodium bicarbonate. If alkalinity (high pH) is a problem neutralized with dilute acetic acid or dilute hydrochloric (muriatic) acid. If required, notify state and local authorities.

### Disposal Method:

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable regulations under the Resource Conservation and Recovery Act. Dispose of material in accordance with all Federal, State and local regulations. Local regulations may be more stringent than Federal or State.

## Shipping Labels

### Proper Shipping Name:

**Hazard Class:** Unclassified

**Label Requirements:** None

**Reportable Quantity:** None

## Additional Information

**Precautions:** Wear protective equipment when handling. Use only with adequate ventilation. Wash thoroughly after handling. Do not breathe dust. Do not get in eyes, on skin, or clothing. Do not swallow.

**Handling:** Keep heat, lights, fire, and sparks away. Keep away from water or acid. For industrial use only. When diluting, add product slowly to water with agitation. Heat is generated upon dilution with water. Addition of water can cause violent splashing.

**Attention:** This container hazardous when emptied. Since emptied container contains product residues (vapor or liquid), all labeled hazard precautions must be observed.

**Storage:** Keep container closed when not in use. Store in a cool dry place. Store away from oxidizers. Keep out of reach of children.

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