

**MATERIAL SAFETY DATA SHEET**

**Best Sulfur Products**

**A division of Ag Formulators Inc.**

**5427 E. Central Ave.**

**Fresno, CA 93725**

**For Emergency Information call Chemtrec (800) 424-9300**

**For Technical Information call (800) 800-4854**

Effective date: 10-30-02

Supersedes: 4-4-00

**I. IDENTIFICATION**

**Product:** BSP CAPTOR®  
**Chemical Name:** Calcium Thiosulfate Solution  
**Formula:** CaS<sub>2</sub>O<sub>3</sub>  
**Chemical Family:** Inorganic Salt

**II. COMPOSITION**

<u>Chemical</u>	<u>CAS#</u>	<u>Concentration</u>	<u>Regulation</u>
Calcium Thiosulfate A solution of CaS <sub>2</sub> O <sub>3</sub> in water	10124-41-1	30%w/v	No

**III. HAZARDOUS IDENTIFICATION**

CERCLA Ratings (0-3): Health = 0 Fire = 0 Reactivity = 0 Persistence = 0  
NFPA Ratings (0-4): Health = 0 Fire = 0 Reactivity = 0

**NSF International Standard 60 listed for use in drinking water.**

**IV. EMERGENCY AND FIRST AID PROCEDURES**

**POTENTIAL SHORT-TERM HEALTH EFFECTS:**

**SKIN CONTACT:** Immediately flush with large quantities of water, remove contaminated clothing and shoes and wash product from skin.

**EYE CONTACT:** Immediately flush eyes with clean water, lifting upper and lower lids, for at least 15-20 minutes. Obtain medical attention if irritation occurs or persists.

**INGESTION:** If vomiting occurs, keep head lower than hips to help prevent aspiration. Treat symptomatically and supportively. Get medical attention if needed.

**INHALATION:** Remove victim from contaminated area. If breathing is labored, administer oxygen. If breathing has ceased, clear the airway and begin mouth to mouth.

**LONG-TERM HEALTH EFFECTS: No information on long-term effects is available.**

## **V. FIRE AND EXPLOSION HAZARD**

Negligible hazard when exposed to heat or flame

**EXTINGUISHING MEDIA:** Extinguish using agent suitable for type of surrounding fire.

**FIRE FIGHTING:** Move container from fire area if possible. Avoid breathing vapors. Keep upwind. Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors. Keep upwind.

**HAZARDOUS COMBUSTION PRODUCTS:** Thermal decomposition products may include toxic oxides of sulfur.

FLASH POINT :	n/d
FLAMMABLE LIMITS IN AIR:	n/d
AUTO IGNITION TEMPERATURE (degrees C (F) :	n/d
EXTINGUISHING MEDIA:	CO <sub>2</sub> , dry chemical foam, water spray

## **VI. ACCIDENTAL RELEASE MEASURES**

Absorb small spills with sand, earth, sweeping compound or other inert absorbent. Dispose of in accordance with all government regulations. Large spills should be diked to prevent entry of large quantities of product into sewers or drains. Recover as much of solution as possible. On large spills, land application could be possible as long as application rates are not exceeded, please check with the local Ag Commissioner for permission. Dispose of in accordance with applicable local, county, state, and federal regulations.

## **VII. HANDLING AND STORAGE**

Do not heat drums with any welding equipment as explosion may occur. Avoid breathing gas. Do not get in eyes, on skin, or on clothing. Store in a cool, dry place in properly designed vessels.

## **VIII. EXPOURE CONTROLS / PERSONAL PROTECTIONS**

No occupational exposure limits have been established by OSHA, ACGIH, or NIOSH.

PROTECTIVE EQUIPMENT SHOULD BE USED DURING THE FOLLOWING PROCEDURES:

- Manufacture or formulation of this product
- Repair and maintenance of contaminated equipment.
- Clean up of leaks and spills
- Any other activity that may result in hazardous exposures.

**RESPIRATORY PROTECTION:**

None generally required. If conditions exist where excessive mist might be generated, a mist respirator is recommended.

In case of emergency conditions such as fire, high heat, and or contact with acids, use a NIOSH / MSHA approved full-face respirator with SO<sub>2</sub> gas cartridge. Use positive pressure self-contained breathing apparatus for emergency or other conditions requiring a higher level of protection.

**CLOTHING:** Rubber gloves and apron should be used for prolonged or repeated contact. Safety glasses or chemical goggles are recommended to avoid eye contact. Do not wear contact lenses.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

**DESCRIPTION:** Clear colorless solution

**Molecular Weight:** 152.20

**Water Solubility:** Completely soluble in water

**Molecular formula for active ingredient:** CaS<sub>2</sub>O<sub>3</sub>

**Solvent Solubility:** Nearly insoluble in alcohol

**Specific Gravity:** 1.245

**pH:** 6.5 – 7.5

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

**X. STABILITY AND REACTIVITY**

Stable under normal conditions and pressures.

**CONDITIONS TO AVOID:** Avoid contact with acids. Sulfur dioxide could be released if mixed with acids.

**INCOMPATIBILITIES:** **Reacts with acid to form sulfur dioxide.** Corrosive to brass and copper.

**XI. TOXICOLOGICAL INFORMATION:**

**LD 50 (rat):** Anhydrous CaS<sub>2</sub>O<sub>3</sub> : 374 mg/kg intravenous

**LD 50 (rat):** 573 mg/kg intraperitoneal

**LD 50 (mouse):** rat LD 50; 115 mg/kg intraperitoneal

**CARCINOGEN STATUS:** None

**ACUTE TOXICITY LEVEL:** Insufficient data.

**TARGET EFFECTS:** No data available.

**SKIN CONTACT:** May be irritating

**EYE CONTACT:** May be irritating.

**INGESTION:** Thiosulfate salts are poorly absorbed from the alimentary tract. Ingestion may result in a cathartic effect.

**CHRONIC EXPOSURE:** No data available for any type of exposure.

## **XII. DISPOSAL CONSIDERATIONS**

Contaminated cleanup materials may be hazardous. Refer to Sections IV and VIII of this MSDS sheet before handling. All contaminated materials should be placed in disposable containers and buried in an approved dumping area. Follow all local rules governing waste disposal in your area.

## **XIII. TRANSPORTATION INFORMATION**

**Classification:** Not hazardous by D.O.T. Regulations  
**D.O.T. Proper Shipping Name:** Calcium Thiosulfate  
**Other Requirements:** N/A

## **XIV. REGULATORY INFORMATION**

### **REGULATORY INFORMATION**

**SARA TITLE III SECTION 313:** NOT LISTED  
**RCRA HAZARDOUS WASTE:** NOT LISTED  
**CA Prop. 65:** NOT LISTED

## **XV. OTHER INFORMATION**

The information herein is given in good faith but no warranty, expressed or implied, is made.