

MATERIAL SAFETY DATA SHEET

Tramfloc, Inc.

P. O. Box 350

Tempe, AZ 85280 480-491-6895

Effective date: 10-30-02

Supersedes: 4-4-00

I. IDENTIFICATION

Product: Calcium Thiosulfate Solution

Chemical Name: Calcium Thiosulfate Solution

Formula: CaS₂O₃

Chemical Family: Inorganic Salt

II. COMPOSITION

Chemical	CAS#	Concentration	Regulation
Calcium Thiosulfate	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 persist.

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: CO₂, 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 SO₂ 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_2O_3

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_2O_3 : 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 contained herein is to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, Tramfloc, Inc. makes no guarantee for results obtained, and assumes no responsibility for damages incurred by use of this product. It is the responsibility of the user to comply with all federal, state and local laws and regulations.