

# SAFETY DATA SHEET

## TRIS BUFFER, pH 7.4

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Tris Buffer, pH 7.4

**Catalog Numbers:** B-172-2

**Company Identification:** ROWLEY BIOCHEMICAL  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications

##### HEALTH HAZARDS

H303-Acute Oral Toxicity: 4

H312-Acute Dermal Toxicity: 4

H315-Skin Corrosion/Skin Irritation: 2

H320-Eye damage/Irritation: 2B

H317-Skin Dermal Sensitization: 1

##### PHYSICAL HAZARDS

Not classified

##### ENVIRONMENTAL HAZARDS

Aquatic acute environmental Hazards: Not classified

Chronic environmental Hazards: Not classified

#### Pictograms or Hazard symbols and Hazard statement.



Warning: Harmful if swallowed. Harmful in contact with skin.  
Causes skin irritation. May cause an allergic skin reaction.

Warning: Causes eye irritation.

## Precautionary Statement

H312+H303+H315

**P280**-Wear protective gloves, clothing, and eye and face protection.

**P302 + P352**-If on skin, wash with plenty of water. Remove contact lenses if present and easy to do so. Continue rinsing.

**P312**-Call a POISON CENTER/physician if you feel unwell.

**P363**-Wash contaminated clothing before reuse.

**P264**-Wash thoroughly after handling.

**P332 + P313**-If skin irritation occurs, get medical advice/attention.

H320

**P305 + P351 + P338**-If in eyes, rinse cautiously with water for several minutes.

**P337 + P313**-If eye irritation persists, get medical advice/attention.

H317

**P261**-Avoid breathing fumes/mist/vapors.

**P272**-Contaminated work clothing should not be allowed out of the work place.

**WARNING! Causes skin irritation. Causes eye irritation.** Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. May cause an allergic skin reaction. Harmful if swallowed.

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
77-88-1	Trizma Crystals	0.76 w/v
7732-18-5	Water	Balance

### Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.

**Oral Exposure:** If Swallowing seek immediate medical advice.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

### Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes.

**Extinguishing Media:** Use water spray, dry chemical powder, or appropriate foam.

**Flash Point:** N/A

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

**Special Remarks on Fire Hazards:** When heated to decomposition it emits toxic fumes of sulfur oxides, hydrogen sulfide, and sodium oxide.

**Special Remarks on Explosion Hazards:** An explosion may occur with raw material if triturated with nitrates, chlorates, or permanganates.

## Section 6 - Accidental Release Measures

### **Procedure(s) of Personal Precaution(s):**

Wear protective gear.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

## Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### **Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Clear

**Odor:** Odorless

**pH:** N/A

**water.**

**Vapor Pressure:** 2.3 kPa @ 20deg. C

**Vapor Density:** 0.62 (Air=1)

**Evaporation Rate:** N/A

**Viscosity:** N/A

**Boiling Point:** 100 deg. C

**Solubility:** N/A

## Section 10 - Stability and Reactivity

**Chemical Stability:** The product is stable.

**Conditions to Avoid:** Heat, incompatible materials.

**Incompatibilities with Other Materials:** Reactive with oxidizing agents, acids, alkalis. Incompatible with iodine, acids, lead, mercury, silver salts, and halogens.

**Hazardous Decomposition Products:** Not available.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:** WE6660000

**LD50/LC50:**

CAS# 77-88-1: Not available

**Carcinogenicity:**

CAS# 77-88-1: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

## Section 12 - Ecological Information

**CAS# 77-88-1.**

**Ecotoxicity:** Not available.

**Environmental:** Not available.

**Physical:** No information available.

**Other:** No information available.

## Section 13 - Disposal Considerations

**Appropriate method of disposal of substance or preparation:**

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

## Section 14 – Transport Information

**DOT**

Non-Regulated

## Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Risk Phrases:**

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed  
R36/38 Irritating to eyes and skin  
R43 May cause sensitization by skin contact

**Safety Phrases:**

S20/21 When using do not eat, drink or smoke  
S2 Keep out of the reach of children.  
S7 Keep container tightly closed.  
S9 Keep container in a well-ventilated place  
S24 Avoid contact with skin.

Section 16 - Additional Information
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**MSDS Creation Date:** 10/15/12**Revision #1. CF 9/9/13**

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