





# **Material Safety Data Sheet**

### **TBS** buffer 10X

# 1: Chemical Product and Company Identification

Product Name: TBS buffer 10X

Catalog Code: 42020056-1, 42020056-2, 42020056-3

CAS#: Mixture.

RTECS: Mixture.

TSCA: TSCA 8(b) inventory: Components were listed.

CI#: Not available.

Synonym: Not available.

Chemical Name: Tris buffered saline

Chemical Formula: Mixture.

**Contact information:** 

bioWORLD

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Order Online:www.bio-world.com

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In case of a chemical emergency, contact local

hospital.

For non-emergency assistance, call: 1-800-860-9729

# 2: Composition and Information on Ingredients

### Composition:

Name	CAS#	% by Weight
Tris	77-86-1	<4
Sodium Chloride	7647-14-5	<5
Potassium Chloride	7447-40-7	<1
Water	7732-18-5	>90

### **Toxicological Data on Ingredients:**

Sodium chloride

LC<sub>50</sub> (Inhalation, Rat): >42 gm/m3/1H

LD<sub>50</sub> (Oral, Mouse): 4 gm/kg LD<sub>50</sub> (Oral, Rat): 3000 mg/kg

Potassium chloride

LD<sub>50</sub> (Oral, Rat): 2600 mg/kg

### 3: Hazards Identification

Potential Acute Health Effects: Irritant.

Irritating to eyes, respiratory system and skin.

**Potential Chronic Health Effects:** 

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

#### 4: First Aid Measures

Eye Contact: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

**Serious Skin Contact:** Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Serious Inhalation: Not available.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Serious Ingestion: Not available.

### 5: Fire and Explosion Data

Flammability of the Product: Noncombustible.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

**Product of Combustion:** Nature of decomposition products not known.

Fire Hazards in Presence of Various Substances: Not available.

**Explosion Hazards in Presence of Various Substances:** 

Not available.

Fire Fighting Media and Instructions:

SMALL FIRE: Dry chemical powder.

LARGE FIRE: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

### **6: Accidental Release Measures**

**Small Spill:** Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

**Large Spill:** Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

# 7: Handling and Storage

**Precautions:** Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage: Keep tightly closed. Store at 2-8°C.

### 8: Exposure Controls/Personal Protection

**Engineering Controls:** Safety shower and eye bath. Mechanical exhaust required.

**Personal Protection:** Respiratory: Government approved respirator.

Hand: Chemical resistant gloves.

Eye: Safety glasses.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Boots. Dust respirator. Gloves.

Exposure Limits: Not available.

# 9: Physical and Chemical Properties

Physical State and Appearance: Liquid.

Odor: Not available.

Taste: Not available.

Molecular Weight: Mixture.

Color: Colorless.

pH(1% soln/water): 7.25 - 7.55

Boiling Point: > 100 °C

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: >1

Vapour Pressure: Not available.

Vapor Density: >1

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff: Not available.

**lonicity (in Water):** Not available.

**Dispersion Properties:** Not available.

Solubility: Soluble in water.

# 10: Stability and Reactivity Data

Stability: Stable.

**Instability Temperature:** Not available.

Conditions of Instability: Not available.

**Incompatibility with various substances:** Strong oxidizing agents, Bases.

Corrosivity: Not available.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# 11:Toxicological Information

Routes of Entry: Skin contact. Eye contact. Ingestion. Inhalation.

Toxicity to Animals:

Sodium chloride

LC<sub>50</sub> (Inhalation, Rat): >42 gm/m3/1H

LD<sub>50</sub> (Oral, Mouse): 4 gm/kg LD<sub>50</sub> (Oral, Rat): 3000 mg/kg LD<sub>50</sub> (Skin, Rabbit): >10 gm/kg

Potassium chloride

LD<sub>50</sub> (Oral, Mouse): 1500 mg/kg LD<sub>50</sub> (Oral, Rat): 2600 mg/kg

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Skin Contact: Causes skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes eye irritation.

Inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

### 12: Ecological Information

**Ecotoxicity:** Not available.

BOD5 and COD: Not available.

Product of Biodegradation: Not available.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

## 13: Disposal Considerations

**Waste Disposal:** Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### 14: Transport Information

**DOT Classification:** Not a DOT controlled material.

Identification: Not available.

**Special Provisions for Transport:** This substance is considered to be non-hazardous for transport.

### 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Tris; Sodium chloride; Potassium chloride; Water

Other Regulations: EU ADDITIONAL CLASSIFICATION

Symbol of Danger: Xi Indication of Danger: Irritant.

R: 36/37/38

Risk Statements: Irritating to eyes, respiratory system and skin.

S: 26-36

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Other Classifications:

WHMIS(Canada): Not available.

**DSCL(EEC):** Not available.

HMIS(U.S.A):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0

Personal Protection:

National Fire Protection Association (U.S.A):

Health: 2

Flammability: 0

Reactivity: 0

### Specific hazard:

**Protective Equipment:** Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety goggles.

### 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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