

# **Tris-HCl Buffer**

Cat#: orb532244 (MSDS)

#### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Tris-HCl Buffer

#### 2. HAZARDS IDENTIFICATION

# **Emergency Overview**

**OSHA Hazards** 

No known OSHA hazards

Not a dangerous substance according to GHS.

HMIS Classification Health hazard: 0 Flammability: 0 Physical hazards: 0

NFPA Rating Health hazard: 0

Fire: 0

Reactivity Hazard: 0
Potential Health Effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation. **Skin** May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

**Ingestion** May be harmful if swallowed.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to OHSA criteria.

## 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

## In case of skin contact

Wash off with soap and plenty of water.

## In case of eye contact

Flush eyes with water as a precaution.



#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIREFIGHTING MEASURES

# **Conditions of flammability**

Not flammable or combustible.

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

#### 6. ACCIDENTAL RELEASE MEASURES

# **Personal precautions**

Avoid breathing vapors, mist or gas.

# **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

## **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

# Personal protective equipment

## Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.



## Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin and body protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Hygiene measures

General industrial hygiene practice.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form liquid

Colour no data available

# Safety data

pH no data available

Melting point/freezing point no data available

Boiling point no data available

Flash point no data available

Ignition temperature no data available

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Vapour pressure no data available

Density no data available

Water solubility no data available

Partition coefficient: n-octanol/water no data available

Relative vapour density no data available

Odour no data available

Odour Threshold no data available

Evaporation rate no data available

#### 10. STABILITY AND REACTIVITY

# **Chemical stability**

Stable under recommended storage conditions.

## Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Materials to avoid

no data available

**Hazardous decomposition products** 



Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

#### 11. TOXICOLOGICAL INFORMATION

# **Acute toxicity**

**Oral LD50** 

no data available

**Inhalation LC50** 

no data available

**Dermal LD50** 

no data available

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

Eyes: no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

no data available

## **Teratogenicity**

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

#### **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.



**Skin** May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

**Synergistic effects** 

no data available

**Additional Information** 

RTECS: Not available

#### 12. ECOLOGICAL INFORMATION

## **Toxicity**

no data available

Persistence and degradability

no data available

**Bioaccumulative potential** 

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

#### 13. DISPOSAL CONSIDERATIONS

## **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

# **Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

**IMDG** 

Not dangerous goods

**IATA** 

Not dangerous goods

#### 15. REGULATORY INFORMATION

## **OSHA Hazards**

No known OSHA hazards



## **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

## SARA 311/312 Hazards

No SARA Hazards

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

# **Pennsylvania Right To Know Components**

Water

CAS-No.

7732-18-5

**Revision Date** 

2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride 1185-53-1

# **New Jersey Right To Know Components**

Water

CAS-No. 7732-18-5

**Revision Date** 

2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride 1185-53-1

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.