

Bioland Scientific LLC

Material Safety Data Sheet

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name **Tris hydrochloride**

Catalog Number CT02
Brand Bioland Chemicals

Company Bioland Scientific LLC
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Paramount, CA 90723
USA

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : TRIS Hydrochloride; TRIS HCl; Tris(hydroxymethyl)aminomethane hydrochloride

Formula : $C_4H_{11}NO_3 \cdot HCl$
Molecular Weight : 157.60 g/mol

CAS-No.	EC-No.	Index-No.	%
1185-53-1	214-684-5		>99.5%

3. HAZARDS IDENTIFICATION

Emergency Overview
OSHA Hazards: Irritant

HMIS Classification
Health Hazard: 2
Flammability: 0
Physical hazards: 1

NFPA Rating
Health Hazard: 2
Fire : 0
Reactivity Hazard: 1

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. The toxicological properties of this substance have not been fully investigated.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

Move person to fresh air immediately. If not breathing give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water for at least 15 minutes while removing contaminated clothing.

Consult a physician.

In case of eye contact

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids.

If swallowed

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

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment as indicated in Section 8. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Vacuum or sweep up material and place into suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and cool place. Hygroscopic.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: crystalline

Safety data

pH: 3.5-5 (0.5 M solution)

Melting point: 150-152 °C (302 -306 °F)

Boiling point: no data available

Flash point: no data available

Ignition temperature: no data available

Lower explosion limit: no data available

Upper explosion limit: no data available

Water solubility: soluble in water

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Exposure to moisture, excess heat.

Incompatibilities with Other Materials: Oxidizing agents, bases, acids, aldehydes, copper, brass and aluminum.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: no data available

Irritation and corrosion: no data available

Sensitisation: no data available

Carcinogenicity

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

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes eye irritation.

Ingestion May be harmful if swallowed.

12. ECOLOGICAL INFORMATION

Elimination information: no data available

Ecotoxicity effects: no data available

Further information on ecology: no data available

13. DISPOSAL CONSIDERATIONS

Product: Dispose of in a manner consistent with federal, state, and local regulations.
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: Irritant

DSL Status: All components of this product are on the Canadian DSL list.

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 Acute Health Hazard

Massachusetts Right To Know Components No Components Listed

Pennsylvania Right To Know Components
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride; CAS-No. 1185-53-1

New Jersey Right To Know Components
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride; CAS-No. 1185-53-1

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Product Use:
For research use only.

Disclaimer:

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