



Material Safety Data Sheet

Catalog Number: 816124
Revision date: 26-Apr-2006

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY INFORMATION

Catalog Number: 816124

Product name: TRIS HYDROCHLORIDE ULTRA PURE

Synonyms: Tris(hydroxymethyl)aminomethane hydrochloride

Supplier:

MP Biomedicals, LLC
29525 Fountain Parkway
Solon, OH 44139
tel: 440-337-1200

Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Weight %	ACGIH Exposure Limits:	OSHA Exposure Limits:
TRIS HYDROCHLORIDE	1185-53-1	90 - 100%	None	None

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause irritation to the eyes, skin and respiratory system.

Category of Danger:

Irritant

Principle routes of exposure: Skin

Inhalation: Irritating to respiratory system

Ingestion: Irritating to mouth, throat and stomach

Skin contact: Irritating to skin.

Eye contact: Contact with eyes may cause irritation

ANSI Classification Irritant - eye, skin, respiratory

Statements of hazard May Cause Eye, Skin and Respiratory Tract irritation.

Statement of Spill or Leak - ANSI Label Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment.

Statement of First Aid In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Precautions - ANSI Label Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Avoid breathing vapors. Avoid prolonged or repeated contact with the skin, eyes or respiratory tract. Wash thoroughly after exposure.

4. FIRST AID MEASURES

General advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Rinse immediately with plenty of water for at least 15 minutes Call a physician immediately

Ingestion: Do not induce vomiting without medical advice.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:

Use dry chemical, CO2, water spray or "alcohol" foam

Specific hazards:

Burning produces irritant fumes.

Unusual hazards:

None known

Special protective equipment for firefighters:

Wear self contained breathing apparatus for fire fighting if necessary.

Specific methods:

Water mist may be used to cool closed containers.

Flash point:

Not determined

Autoignition temperature:

Not determined

NFPA rating:

NFPA Health: 0

NFPA Flammability: 0

NFPA Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Use personal protective equipment.

Environmental precautions:

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up:

Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Storage:

ROOM TEMPERATURE

DESICCATE

Handling:

Use only in area provided with appropriate exhaust ventilation.

Safe handling advice:

Wear personal protective equipment. Remove and wash contaminated clothing before reuse.

Technical measures/storage conditions:

Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place.

Incompatible products:

Oxidising and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Impervious clothing

Eye protection: Goggles

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.



9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Powder
Formula:	C ₄ H ₁₁ NO ₃ • HCl
Molecular weight:	157.6
Melting point/range:	150-152°C (dec.)
Boiling point/range:	No Data available at this time.
Density:	No data available
Vapor pressure:	No data available
Evaporation rate:	No data available
Vapor density:	No data available
Solubility (in water):	Soluble
Flash point:	Not determined
Autoignition temperature:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Polymerization:	None under normal processing.
Hazardous decomposition products:	Chloride/Hydrochloric acid , Nitrogen oxides (NO _x)/ammonia/CN-
Materials to avoid:	Bases Strong oxidising agents
Conditions to avoid:	Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Product Information

Acute toxicity

Components

TRIS HYDROCHLORIDE

RTECS Number:

Not Available

Selected LD50s and LC50s

Not Determined

Chronic toxicity:	Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness.
Local effects:	Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Specific effects:	May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache.
Primary irritation:	A primary irritant.
Carcinogenic effects:	No data is available on the product itself.
Mutagenic effects:	No data is available on the product itself.
Reproductive toxicity:	No data is available on the product itself.

12. ECOLOGICAL INFORMATION

Mobility:	No data available
Bioaccumulation:	No data available
Ecotoxicity effects:	No data available
Aquatic toxicity:	May cause long-term adverse effects in the aquatic environment.

Components	U.S. DOT - Appendix B - Marine Pollutan	U.S. DOT - Appendix B - Severe Marine Pollutants	United Kingdom - The Red List:
TRIS HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	Germany VCI (WGK)	World Health Organization (WHO) - Drinking Water	Ecotoxicity - Fish Species Data
TRIS HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Microtox Data	Ecotoxicity - Water Flea Data
TRIS HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	EPA - ATSDR Priority List	EPA - HPV Challenge Program Chemical List	California - Priority Toxic Pollutants
TRIS HYDROCHLORIDE	Not Listed	Not Listed	Not Listed
Components	California - Priority Toxic Pollutants	California - Priority Toxic Pollutants	
TRIS HYDROCHLORIDE	Not Listed	Not Listed	

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

**Contaminated packaging:
Methods for cleaning up:**

Do not re-use empty containers
Soak up with inert absorbent material.

14. TRANSPORT INFORMATION

UN/Id No:

Not regulated

DOT:**Proper shipping name:**

Not Regulated

Components	U.S. DOT - Appendix A Table 1 - Reportable Quantities
TRIS HYDROCHLORIDE	Not Listed

TDG (Canada):**WHMIS hazard class:**

D2b toxic materials



:

IMDG/IMO**IMDG - Hazard Classifications**

Not Applicable

Components	U.S. DOT - Appendix B - Marine Pollutants	U.S. DOT - Appendix B - Severe Marine Pollutants
TRIS HYDROCHLORIDE	Not Listed	Not Listed

IMO-labels:

15. REGULATORY INFORMATION

International Inventories

Components

TRIS HYDROCHLORIDE

Inventory - United States TSCA - Sect. 8(b)

Present

Canada DSL Inventory List -

Present

Australia (AICS):

Present

Inventory - China:

Present

EU EINECS List -

214-684-5; C4H11NO3.CIH

Korean KECL:

KE-34819

Philippines PICCS:

Present

U.S. regulations:

Components

TRIS HYDROCHLORIDE

California Proposition 65

Not Listed

Massachusetts Right to Know List:

Not Listed

New Jersey Right to Know List:

Not Listed

Pennsylvania Right to Know List:

Not Listed

Components

TRIS HYDROCHLORIDE

Florida substance List:

Not Listed

Rhode Island Right to Know List:

Not Listed

Illinois - Toxic Air Contaminants

Not Listed

Connecticut - Hazardous Air Pollutants

Not Listed

Components

TRIS HYDROCHLORIDE

SARA 313 Emission reporting/Toxic Release of Chemicals

Not Listed

CERCLA/SARA - Section 302 Extremely Haz

Not Listed

NTP:

None

IARC:

None

SARA 313 Notification:

The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification:

The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

16. OTHER INFORMATION

Prepared by: Health & Safety

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End of Safety Data Sheet