

# Material Safety Data Sheet

Revision: 12/16/2005



Hazard information is provided for compliance with both the UK Chemicals (Hazard Information and Packaging) (CHIP) Regulations and the US Hazard Communication Standard (HCS)

## IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT NAME:  
Tris, Ultrapure

PRODUCT CODE:  
75825

EEC NUMBER:  
201-064-4

### SUPPLIER:

USB Corporation, 26111 Miles Road, Cleveland, Ohio 44128 Phone: (216) 765-5000  
Please visit our website at [www.usbweb.com](http://www.usbweb.com) for contact information on USB product distributors within your area.

### Emergency Contact:

Chemtrec (800) 424-9300  
Outside USA & Canada 703 527 3887

## COMPOSITION/HAZARDOUS COMPONENTS

### HAZARD

### CAS NO.

### %WT

### TLV

### CHIP R & S Phrases

Tris

77-86-1

~ 100%

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R:36/37/38 Irritating to eyes respiratory system and skin.  
S:26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.  
S:36/37 Wear suitable protective clothing and gloves.

## HAZARDS IDENTIFICATION

### CHIP

Irritant

### HCS

Irritant

## FIRST-AID MEASURES

EYES: Flush with water for 15 minutes. Seek medical advice if irritation persists.

SKIN: Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.

INHALATION: Remove the victim from exposure and move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Seek immediate medical attention.

INGESTION: Drink water and seek immediate medical attention. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

## FIRE-FIGHTING INFORMATION

Use media suitable to extinguish the supporting or surrounding fire. Wear NIOSH (or equivalent) approved self contained breathing apparatus. For small fires only: use carbon dioxide, dry powder or foam. May emit toxic fumes under fire conditions.

Flash Point = No data available.

## ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. Collect in a manner that does not create dust and place in a suitable waste container. Avoid contact of material with skin or eyes. Use adequate ventilation.

## HANDLING AND STORAGE

Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. Avoid contact of material with skin or eyes. Use adequate ventilation. Store ambient away from oxidizing agents.

## PERSONAL PROTECTION

Wear appropriate personal protective equipment and clothing including lab coat, safety glasses, gloves and NIOSH-approved respirator. A qualified industrial hygienist should evaluate the need for respiratory protection. Use respiratory protection approved by NIOSH (or equivalent) and appropriate to the hazard. Avoid contact of material with skin or eyes. Mechanical ventilation or local exhaust as needed to control exposure to dust, vapors or mists. Access to a safety shower and eye-wash.

## PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline powder  
Vapor Pressure: No data available  
Solubility (Water): Soluble  
Percent Volatile: No data available  
Chemical formula: C<sub>4</sub>-H<sub>11</sub>-N-O<sub>3</sub>

Boiling Point: 219-220°C  
Vapor Density: No data available  
Specific Gravity: No data available  
Evaporation Rate: No data available  
Melting Point: 171.2-172.3°C

**STABILITY AND REACTIVITY**

Product is stable. Incompatible with oxidizing agents. Hazardous decomposition products include toxic fumes of carbon and nitrogen oxides. Avoid heat and flames. Hazardous polymerization will not occur.

**TOXICOLOGICAL INFORMATION**

**EFFECTS OF OVEREXPOSURE:**

**EYES:** Contact may cause irritation.

**SKIN:** Contact may cause redness, swelling and pain at any site, especially mucous membranes.

**INHALATION:** Excessive inhalation of dust may cause irritation, cough and shortness of breath.

**INGESTION:** Chronic ingestion or excessive dosage may cause nausea, vomiting, and diarrhea; large amounts may cause weakness, collapse and coma.

**ADDITIONAL INFORMATION:**

Ingestion may cause irritation to mouth, throat and esophagus and gastrointestinal tract.

Toxicity data listed in RTECS under TY2900000.

Only select RTECS information is provided here. Please see actual RTECS entry for complete information.

Oral Rat LD50 = 5900 mg/kg (Milan, Italy - 1971) Details of toxic effects not reported other than lethal dose value.

Definition(s): RTECS = Registry of Toxic Effects of Chemical Substances.

**ECOLOGICAL INFORMATION**

No information available.

**DISPOSAL CONSIDERATIONS**

Dispose of material in accordance with applicable local, state, and federal regulations.

**TRANSPORTATION INFORMATION**

US DOT / IATA: No applicable information.

**REGULATORY INFORMATION**

RCRA - No applicable information.

SARA 302 - This material does not have an RQ or TPO.

SARA 313 - This material is not reportable under 313.

EPA TSCA Section 8(b) - Chemical Inventory.

Exposure Limits - Not established.

California Proposition 65 - No applicable information.

This data sheet is based upon information believed to be reliable. The Company makes no statement or warranty as to the accuracy or completeness of the information contained herein which is offered for your consideration, investigation and verification. Any use of the information contained in this data sheet must be determined by the user to be in accordance with appropriate applicable regulations.