Material Safety Data Sheet

Accorrding To OSHA and ANSI

Reviewed on 1/7/2008

1. Identification of Substance:

Product details:

Name: Tris(2-carboxyethyl)phosphine hydrochloride

Stock number: M115

Synonyms: TCEP, TCEP HCI

Manufacturer/Supplier:

Soltec Ventures

Suite 454G Cummings Center Beverly MA 01915 USA Emergency phone (978)922-9446 CHEMTREC (800) 424-9300

2. Composition/Data on Components:

Chemical Characterization:

Description:

Tris(2-carboxyethyl)phosphine hydrochloride 100%

Identification Number (s):

Additional Information:

3. Hazards Identification

Hazard Description:

Corrosive N.O.S.

Information pertaining to particular dangers for man and the environment:

Dusts may be irritating to skin and respiratory tract

4. First Aid Measures

General Information:

Immediately remove clothing soiled by the product

After Inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

After skin contact:

Immediately wash with water and rinse thoroughly. Seek immediate medical advice.

After Eye Contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Seek immediate medical advice.

5. Fire Fighting Measures

Suitable Extinguishing Agents:

Carbon dioxide, sand, extinguishing powder.

Special Hazards:

In case of fire the following can be released-carbon dioxide, carbon monoxide, phosphine oxides

Protective Equipment:

Wear self-contained respirator Wear fully protective impervious suit

6. Accidental Release Measures

Person Related Safety Precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Measures for Environmental Protection:

Do not allow material to be released to the environment without proper government permits.

Measures for Cleaning/Collecting:

Use neutralizing agent. Dispose contaminated material as waste according to local, state and federal rules.

Ensure adequate ventilation.

Do not flush with water or water containing solutions.

7. Handling and Storage

Information for Safe Handling:

Handle under dry protective inert gas. Keep container tightly sealed.

Protective Information for Explosion and Fire:

Keep ignition sources away. Keep away from heat and humidity.

Information for Safe Storage:

Store in tightly sealed amber bottles at ambient temperature.

Store under lock and key with access restricted to technical experts only.

8. Exposure Controls and Personal Protection:

Use properly operating fume hood designed for hazardous chemicals and having a face velocity of at least 100 feet per minute.

Components with Limit Values that require monitoring at the workplace:

Personal Protective Equipment:

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Protection of Hands: Impervious gloves
Protection of Eyes: Safety glasses or goggles
Protection of Body: Protective work clothing

9. Physical and Chemical Properties:

Form: Powder

Color: White to pale yellow crystals

Odor: Not determined

Melting Point: Not determined Boiling Point: Not applicable Flash point: Not applicable

Ignition Temperature: Not applicable

Decomposition Temperature: Not determined

Exposure Limits:

Lower: Not determined
Upper: Not determined
Vapor Pressure: Not determined

Density: Not determined Solubility in/Miscibility with:

Water: Soluble Alcohols: Insoluble

10. Stability and Reactivity:

Decomposition will not occur if stored according to specifications.

Materials to avoid:

Acids, oxidizing agents, halogens, bases, acid chlorides, acid anhydrides

11. Toxicological Information:

Acute Toxicity: Irritant to skin and mucous membranes

On the Skin: Corrosive effect on skin and mucous membranes

On the Eye: Strong corrosive effect, reducing agent

Sensitization: No sensitizing effects known

Subacute to Chronic Toxicity:

Corrosive materials are destructive to the respiratory tract, eyes, skin and digestive tract. Eye contact may result in permanent damage and complete loss of vision. Ingestion may cause damage to the mouth, throat and esophagus. Causes skin burns or irritation depending on the severity of exposure.

Additional Toxicological Information:

To the best of our knowledge the acute and chronic toxicity of this compound is not fully known.

ACGIH A4:

Not classifiable as a human carcinogen. There is inadequate data on which to classify the agent in terms of the carcinogenicity in humans and animals.

12. Ecological Information:

Do not allow the material to be released to the environment.

13. Disposal Considerations:

Product: Consult state, local, and national regulations for proper disposal.

Uncleaned Packaging: Disposal must be made according to official regulations.

14. Transport Information:

DOT Regulations:

Hazard Class: None **Identification Number:**

Packing Group: Proper Shipping Name:

15. Regulations:

Hazard Symbols:

This product is not listed in the US Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only.

For use only by qualified individuals.

16. Other Information:

Employer should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process is the responsibility of the user.