

MATERIAL SAFETY DATA SHEET

Triethanolamine Tetra- ethylene Pentamine

SECTION 1 . Product and Company Identification

Product Name and Synonym: Triethanolamine Tetra- ethylene Pentamine

Product Code: 261-50

Material Uses:
Manufacturer: OFI Testing Equipment, Inc.
11302 Steeplecrest Drive
Houston, TX 77065 USA
Phone: (713) 880-9885
Fax: (713) 880-9886

Entry Date : 5/11/2010

Print Date: 9/13/2010

24 Hour Emergency Assistance : Chemtrec 800-424-9300
Canutec 613-996-6666

Health:	1
Flammability:	2
Reactivity:	2

Hazard Rating:
Least Slight Moderate High Extreme
0 1 2 3 4
NA = Not Applicable NE = Not Established

SECTION 2 HAZARD IDENTIFICATION

May be harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

Emergency Overview: Warning! Harmful if swallowed. Causes skin irritation and severe eye irritation.

Inhalation: No Adverse Effects Expected Since Triethanolamine has a Low Vapor Pressure.

Ingestion: May Cause Burns in the Mouth, Pharynx, and Esophagus, Abdominal Pain, Nausea, Vomiting and Diarrhea.

Skin: May Cause Irritation, Redness, and Pain, Especially on Prolonged or Repeated Contact.

Eye Contact: Contact Causes Severe Irritation, Burns, Redness, and Pain. May Cause Irritation, Redness, Pain, and Corneal Damage.

Chronic Exposure: Repeated Ingestion has Caused Kidney and Liver Damage to Animals.

Aggravated by Exposure: No Information Found.

SECTION 3 MIXTURE COMPONENTS

SARA 313	Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
<input type="checkbox"/>	Tetraethylenepentamine	CAS# 112-57-2	16 - 20%	V/V	OSHA TWA 50 ppm (270 mg/m ³)
<input type="checkbox"/>	Triethanolamine 99%	CAS# 102-71-6	16 - 20%	V/V	OSHA TWA 50 ppm (270 mg/m ³)
<input type="checkbox"/>	Water, Deionized ASTM Type II	CAS# 7732-18-5	Balance	V/V	None Established

SECTION 4 FIRST AID MEASURES

May be harmful if swallowed. May cause irritation. Avoid breathing vapors, or dusts.

Triethanolamine Tetra- ethylene Pentamine

Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling.

FIRST AID: SKIN: Remove contaminated clothing. Wash exposed area with soap and water. If irritation persists, seek medical attention.

EYES: Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally. Seek Medical Aid. INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen

INGESTION: Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Fire Extinguisher Type: Carbon Dioxide, dry chemical powder or appropriate foam

Fire / Explosion Hazards: Thermal decomposition produces highly toxic fumes. Do not direct water stream at burning pools.

Fire Fighting Procedure: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing. Dike and collect water used to fight fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Wear Protective equipment. Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

Ventilate Area of Leak or Spill. Wear Appropriate Personal Protective Equipment as Specified in Section 8. Contain and Recover Liquid when Possible. Collect Liquid in an Appropriate Container or Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth), and Place in a Chemical Waster Container. Do Not Use Combustible Materials, such as Saw Dust. Do Not Flush To Sewer!

SECTION 7 HANDLING AND STORAGE

Wash thoroughly after handling. Remove contaminated clothes and wash before reuse. Use with adequate ventilation. Do not store above 110 deg F. Do not reuse containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection: None required

Ventilation

Local Exhaust

Mechanical

Protective Gloves: PVC coated, Butyl, or other suitable gloves.

Eye Protection: Goggles and Face Shield

Other Protective Equipment: Wear appropriate clothing to prevent skin exposure

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Melting Point:	Information not available	Percent Volatile by Volume:	Information not available
Boiling Point:	Information not available	Evaporation Rate	Information not available

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Vapor Pressure:	Information not available	Evaporation Standard	
Vapor Density:	Information not available	Auto Ignition Temp	Information not available
Solubility in Water:	Soluble	Lower Flamm. Limit in Air	Not applicable
Appearance /Odors:	Clear to pale yellow liquid with ammonia odor	Upper Flamm. Limit in Air	Not applicable
Flash Point:	Not applicable		
Specific Gravity:	Information not available		

SECTION 10 STABILITY AND REACTIVITY INFORMATION

Stability:	Stable
Conditions to Avoid:	Sensitive to light and air
Materials to Avoid:	Oxidizing agents, acids.
Hazardous Decomposition Products:	Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

SECTION 11 Toxicological Information

Carcinogenic References: IARC Category- None, NTP Carcinogen - Known: No

SECTION 12 Ecological Information

Environmental Fate: When Released into the Soil, this Material is Expected to Biodegrade. When Released into the Soil, this Material may Leach into Groundwater. When Released into the Soil, this Material is Expected to have a Half-Life of 1 and 10 Days. When Released into the Water, this Material is Expected to Readily Biodegrade.

SECTION 13 Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 Transport Information

DOT Classification: Not Regulated

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

SECTION 15 Regulatory Information

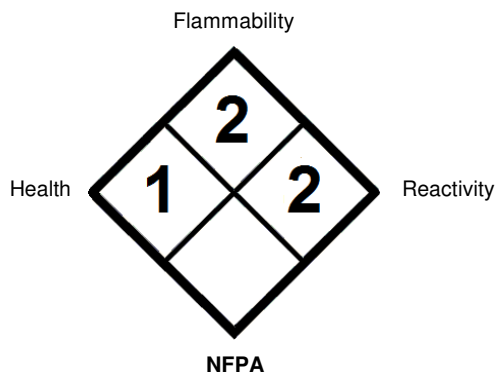
Components listed on TSCA Inventory.

SECTION 16 Additional Information

Warning! Harmful if swallowed! Causes skin irritation and severe eye irritation. If ingested may cause burns to mouth, pharynx and esophagus, abdominal pain, nausea, vomiting and diarrhea. Conditions aggravated: Persons with preexisting skin, eye or respiratory conditions may be more susceptible. Chronic: Dermatitis, conjunctivitis, kidney and liver damage.

Triethanolamine Tetra- ethylene Pentamine

Target Organs: Liver, kidneys.



Revisions

6/26/2010

0.1

updated msds to 16 section from 10 section
msds. STN

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