FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 832.00

Revision Date: March 15, 2001

Section 1 — Chemical Product and Company Identification

Triethanolamine

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

Triethanolamine

Synonym: 2,2',2"-nitilo-triethanol, trihydroxytriethylamine

CAS#: 102-71-6

Section 3 — Hazards Identification

Colorless, viscous, liquid; slight ammonia odor. Turns brown on exposure to air and light.

Body tissue irritant. Avoid all body tissue contact.

Combustible liquid.

FLINN AT-A-GLANCE

Health-0 Flammability-1 Reactivity-1 Exposure-1 Storage-1

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Give large quantities of water. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Class IIIB Combustible liquid.

When heated to decomposition, emits toxic fumes of NOx, and cyanides.

Flash Point: 365 F; Explosion Limits: UEL: 8.5%, LEL: 1.3%; Autoignition Temperature: 600 F

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE

and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

H-2

F-1

R-1

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand and absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Organic #2. Store with alcohols, glycols, amines and amides.

Store in a cool, dry place. Keep container tightly closed. Material may freeze below 60 F. Use and dispense in a hood.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: TWA 5 mg/m3 (ACGIH)

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Section 9 — Physical and Chemical Properties

Colorless, viscous, liquid; slight ammonia odor. Turns

brown on exposure to air and light.

Solubility: Chloroform. Miscible with water and alcohol.

Formula: N(CH2CH2OH)3 Formula Weight: 149.22 Specific Gravity: 1.126 Melting Point: 21.2 C

Boiling Point: 190-193 @ 5 mm Vapor Pressure: 0.01 mm (20 C)

Section 10 — Stability and Reactivity

Avoid contact with strong oxidizers.

Shelf Life: Fair, turns brown on exposure to air and light. Slightly hydroscopic.

Section 11 — Toxicological Information

Acute effects: Irritant
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: 8 gm/kg
IHL-RAT LC50: N.A.
SKN-RBT LD50: >20 gm/kg

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations. Flinn Suggested Disposal Method 18b is one option.

Section 14 — Transport Information

Shipping Name: Not regulated

Hazard Class: N/A UN Number: N/A N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (203-049-8).

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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