FLINN AT-A-GLANCE

0 is low hazard, 3 is high hazard

NFPA CODE

None

established

Health-1

Flammability-3

Reactivity-1 Exposure-2 Storage-3

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

N,N,N,N-Tetramethyl-Ethylenediamine

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

N,N,N,N-Tetramethyl-Ethylenediamine Synonym: TEMED CAS#: 110-18-9

SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Slight odor of ammonia. Slightly toxic by ingestion. Corrosive to body tissues. Avoid all body tissue contact. Flammable liquid.

SECTION 4 — FIRST AID MEASURES

Call a physician and 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 or External: Immediately flush with fresh water for at least 15 minutes. Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid. Extremely dangerous fire risk. Flash point: 10 °C Flammable limits: Lower: 0.98% Upper: 9.08% When heated to decomposition, emits very toxic fumes of NO_x. **Fire Fighting Instructions:** Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand or other inert 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 dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can. 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 exhaust ventilation to keep airborne concentrations low.

MSDS #: 810.50 Revision Date: April 28, 2011

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid with slight odor of ammonia. Solubility: Water and most organic solvents. Formula: $C_6H_{16}N_2$ Formula weight: 116.21

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with acids, acid chlorides, acid anhydrides, strong oxidizers, copper and copper alloys. Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Harmful liquid and fumes, corrosive Chronic effects: N.A. Target organs: N.A. ORL-RAT LD_{50} : 1580 mg/kg IHL-RAT LC_{50} : N.A. SKN-RBT LD_{50} : 5390 mg/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 review all federal, state and local regulations that may apply, before proceeding. Flinn Suggested Disposal Method #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: 1,2 Di-(dimethylamino) ethane Hazard class: 3, Flammable liquid UN number: UN2372 N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (203-744-6), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.

Boiling point: 120-122 °C Melting point: -55 °C Specific gravity: 0.770