

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATHESON TRI-GAS, INC.
150 Allen Road Suite 302
Basking Ridge, New Jersey 07920
Information: 1-800-416-2505

Emergency Contact:
CHEMTREC 1-800-424-9300
Calls Originating Outside the US:
703-527-3887 (Collect Calls Accepted)

SUBSTANCE: POLY-ETCH

TRADE NAMES/SYNONYMS:
MTG MSDS 157; MATNE503

CREATION DATE: May 11 1992
REVISION DATE: Dec 11 2008

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: TETRAETHYLENE GLYCOL DIMETHYL ETHER
CAS NUMBER: 143-24-8
PERCENTAGE: 73.86

COMPONENT: SODIUM NAPHTHALENE COMPLEX
CAS NUMBER: 3481-12-7
PERCENTAGE: 26.14

3. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=3 FIRE=1 REACTIVITY=1

EMERGENCY OVERVIEW:

COLOR: gray or black

PHYSICAL FORM: liquid

ODOR: sweet odor

MAJOR HEALTH HAZARDS: No significant target effects reported.

PHYSICAL HAZARDS: May react on contact with water.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation (possibly severe), nausea, vomiting, diarrhea, difficulty breathing,



headache, drowsiness, dizziness, difficulty speaking, tremors, loss of coordination, blurred vision, bluish skin color, lung congestion, kidney damage, liver damage

LONG TERM EXPOSURE: nausea, digestive disorders, loss of appetite, headache, drowsiness, tremors, blood disorders, reproductive effects

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation (possibly severe)

LONG TERM EXPOSURE: irritation, headache, drowsiness, dizziness, difficulty speaking, loss of coordination, blurred vision, lung congestion, blood disorders, kidney damage, liver damage

EYE CONTACT:

SHORT TERM EXPOSURE: irritation (possibly severe), blindness

LONG TERM EXPOSURE: no information on significant adverse effects

INGESTION:

SHORT TERM EXPOSURE: burns, difficulty breathing, headache, drowsiness, dizziness, difficulty speaking, tremors, loss of coordination, blurred vision, kidney damage

LONG TERM EXPOSURE: irritation, kidney damage, liver damage, reproductive effects

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Thoroughly clean and dry contaminated clothing before reuse. Destroy contaminated shoes.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

INGESTION: Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

NOTE TO PHYSICIAN: For inhalation, consider oxygen. For ingestion, consider gastric lavage.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Slight fire hazard.

EXTINGUISHING MEDIA: Large fires: Use regular foam or flood with fine water spray.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Use extinguishing agents appropriate for surrounding fire. Do not get water directly on material. Large fires: Flood with fine water spray. Reduce

vapors with water spray. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

FLASH POINT: 208 F (98 C) (SCC)

FLAMMABILITY CLASS (OSHA): IIIB

6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Do not touch spilled material. Stop leak if possible without personal risk. Small spills: Absorb with sand or other non-combustible material. Small dry spills: Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry.

7. HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances. See original container for storage recommendations.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

POLY-ETCH:

No occupational exposure limits established.

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any chemical cartridge respirator with organic vapor cartridge(s).

Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).

Any air-purifying respirator with a full facepiece and an organic vapor canister.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-

pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.

Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: liquid

COLOR: gray or black

ODOR: sweet odor

BOILING POINT: 527 F (275 C) (tetraethylene glycol dimethyl ether)

FREEZING POINT: Not available

VAPOR PRESSURE: <0.01 mmHg @ 20 C (TETRAETHYLENE GLYCOL DIMETHYL ETHER)

VAPOR DENSITY (air=1): >1.0 (tetraethylene glycol dimethyl ether)

SPECIFIC GRAVITY: Not available

WATER SOLUBILITY: reacts

PH: Not available

VOLATILITY: Not available

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not available

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

10. STABILITY AND REACTIVITY

REACTIVITY: May react on contact with water.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. May ignite or explode on contact with combustible materials.

INCOMPATIBILITIES: oxidizing materials, combustible materials

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

TETRAETHYLENE GLYCOL DIMETHYL ETHER:

IRRITATION DATA: 500 mg eyes-rabbit mild

TOXICITY DATA: 5140 mg/kg oral-rat LD50

ACUTE TOXICITY LEVEL:

Slightly Toxic: ingestion

REPRODUCTIVE EFFECTS DATA: Available.

SODIUM NAPHTHALENE COMPLEX:

LOCAL EFFECTS:

Corrosive: inhalation, skin, eye, ingestion

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:

PROPER SHIPPING NAME: Corrosive liquids, n.o.s. (SODIUM NAPHTHALENE COMPLEX)

ID NUMBER: UN1760

HAZARD CLASS OR DIVISION: 8

PACKING GROUP: III

LABELING REQUIREMENTS: 8



CANADIAN TRANSPORTATION OF DANGEROUS GOODS:

SHIPPING NAME: Corrosive liquid, n.o.s. (SODIUM NAPHTHALENE COMPLEX)

UN NUMBER: UN1760

CLASS: 8

PACKING GROUP/CATEGORY: III

15. REGULATORY INFORMATION

U.S. REGULATIONS:

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355 Subpart B): Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355 Subpart C): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370 Subparts B

and C):

ACUTE: Yes

CHRONIC: No

FIRE: No

REACTIVE: No

SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65): Not regulated.

OSHA PROCESS SAFETY (29 CFR 1910.119): Not regulated.

STATE REGULATIONS:

California Proposition 65: Not regulated.

CANADIAN REGULATIONS:

WHMIS CLASSIFICATION: Not determined.

NATIONAL INVENTORY STATUS:

U.S. INVENTORY (TSCA): Not listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CANADA INVENTORY (DSL/NDSL): Not determined.

16. OTHER INFORMATION

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