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: ETHYL ACRYLATE, INHIBITED

TRADE NAMES/SYNONYMS:
MTG MSDS 182; ETHYL PROPENOATE; 2-PROPENOIC ACID, ETHYL ESTER; ETHYLACRYLATE; ACYCLIC ACID, ETHYL ESTER; ETHOXYCARBONYLETHYLENE; ETHYL 2-PROPENOATE; ETHYL ACRYLIC ESTER; ACRYLIC ACID ETHYL ESTER; ETHYL ACRYLATE; ACYRESTER E; UN 1917; RCRA U113; C5H8O2; MAT08770; RTECS AT0700000

CHEMICAL FAMILY: carboxylic acids, esters

CREATION DATE: Jan 24 1989
REVISION DATE: Dec 11 2008

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: ETHYL ACRYLATE, INHIBITED
CAS NUMBER: 140-88-5
PERCENTAGE: >99

COMPONENT: HYDROQUINONE
CAS NUMBER: 123-31-9
PERCENTAGE: 0.10000

COMPONENT: 4-METHOXYPHENOL
CAS NUMBER: 150-76-5
PERCENTAGE: 0.00130-0.02000

3. HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=3 FIRE=3 REACTIVITY=2

EMERGENCY OVERVIEW:
COLOR: colorless
PHYSICAL FORM: liquid
ODOR: irritating odor
MAJOR HEALTH HAZARDS: harmful on contact with the skin, respiratory tract irritation, skin irritation, eye irritation, tears, allergic reactions, suspect cancer hazard (in animals)
PHYSICAL HAZARDS: Flammable liquid and vapor. Vapor may cause flash fire. May polymerize. Containers may rupture or explode.

POTENTIAL HEALTH EFFECTS:
INHALATION:
SHORT TERM EXPOSURE: irritation (possibly severe), lack of sense of smell, nausea, difficulty breathing, headache, drowsiness, lung congestion, convulsions
LONG TERM EXPOSURE: same as effects reported in short term exposure
SKIN CONTACT:
SHORT TERM EXPOSURE: irritation (possibly severe), allergic reactions, absorption may occur
LONG TERM EXPOSURE: same as effects reported in short term exposure
EYE CONTACT:
SHORT TERM EXPOSURE: irritation (possibly severe), tearing, blurred vision
LONG TERM EXPOSURE: same as effects reported in short term exposure
INGESTION:
SHORT TERM EXPOSURE: burns, sore throat, vomiting, digestive disorders, difficulty breathing, bluish skin color, convulsions
LONG TERM EXPOSURE: reproductive effects, cancer

4. FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

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

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

INGESTION: If a large amount is swallowed, get medical attention.

5. FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Severe fire hazard. Vapor/air mixtures are explosive above flash point. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Containers may rupture or explode if exposed to heat.
EXTINGUISHING MEDIA: regular dry chemical, carbon dioxide, water, regular foam, alcohol-resistant foam

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. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck: Evacuation radius: 800 meters (1/2 mile). Do not attempt to extinguish fire unless flow of material can be stopped first. Flood with fine water spray. Do not scatter spilled material with high-pressure water streams. 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. Water may be ineffective.

FLASH POINT: 47 F (8.3 C) (CC)
LOWER FLAMMABLE LIMIT: 1.4%
UPPER FLAMMABLE LIMIT: 14%
AUTOIGNITION: 702 F (372 C)
FLAMMABILITY CLASS (OSHA): IB

6. ACCIDENTAL RELEASE MEASURES

WATER RELEASE:
Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

OCCUPATIONAL RELEASE:
Avoid heat, flames, sparks and other sources of ignition. Stop leak if possible without personal risk. Reduce vapors with water spray. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Large spills: Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:
ETHYL ACRYLATE, INHIBITED:
ETHYL ACRYLATE:
25 ppm (100 mg/m3) OSHA TWA (skin)
5 ppm (20 mg/m3) OSHA TWA (skin) (vacated by 58 FR 35338, June 30, 1993)
25 ppm (100 mg/m3) OSHA STEL (vacated by 58 FR 35338, June 30, 1993)
5 ppm ACGIH TWA
15 ppm ACGIH STEL
NIOSH TWA (lowest feasible concentration)

VENTILATION: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. 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.

PROTECTIVE MATERIAL TYPES: rubber

RESPIRATOR: The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.
At any detectable concentration -
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
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.
Escape -
Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister.
Any appropriate escape-type, self-contained breathing apparatus.
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
APPEARANCE: clear
COLOR: colorless
ODOR: irritating odor
MOLECULAR FORMULA: C-H2-C-H-C-O-O-C-H2-C-H3
BOILING POINT: 210-212 F (99-100 C)
FREEZING POINT: -98 F (-72 C)
VAPOR PRESSURE: 29 mmHg @ 20 C
VAPOR DENSITY (air=1): 3.5
SPECIFIC GRAVITY (water=1): 0.9
BULK DENSITY: 7.6 lbs/gal
WATER SOLUBILITY: 1.5% @ 20 C
PH: Not available
VOLATILITY: Not available
ODOR THRESHOLD: 0.00024 ppm
EVAPORATION RATE: 3.3 (butyl acetate=1)
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available
SOLVENT SOLUBILITY:
Soluble: alcohol, ether, chloroform, organic solvents

10. STABILITY AND REACTIVITY

REACTIVITY: Polymerizes with evolution of heat. Avoid contact with light or storage and use above room temperature. Closed containers may rupture violently.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Keep out of water supplies and sewers.

INCOMPATIBILITIES: acids, bases, oxidizing materials, peroxides

HAZARDOUS DECOMPOSITION:
Thermal decomposition products: oxides of carbon

POLYMERIZATION: Polymerizes with evolution of heat. Avoid contact with heat or light and monitor inhibitor content.

11. TOXICOLOGICAL INFORMATION

ETHYL ACRYLATE, INHIBITED:
IRRITATION DATA: 1204 ppm/14 hour(s)-intermittent eyes-rat; 1204 ppm/15 hour(s)-intermittent eyes-monkey; 500 mg open skin-rabbit mild; 10 mg/24 hour(s) skin-rabbit mild; 45 mg eyes-rabbit mild; 1204
ppm/7 hour(s) eyes-rabbit; 1204 ppm/7 hour(s) eyes-guinea pig

TOXICITY DATA:
- 1414 ppm/4 hour(s) inhalation-rat LC50; 500 ul/kg skin-rabbit LD50; 800 mg/kg oral-rat LD50

CARCINOGEN STATUS:
- IARC: Human No Adequate Data, Animal Sufficient Evidence, Group 2B;
- ACGIH: A4 -Not Classifiable as a Human Carcinogen; EC: Category 2

LOCAL EFFECTS:
- Irritant: inhalation, skin, eye
- Lacrimator: eye

ACUTE TOXICITY LEVEL:
- Toxic: dermal absorption
- Moderately Toxic: inhalation, ingestion

TARGET ORGANS:
- immune system (sensitizer)

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
- heart or cardiovascular disorders,
- respiratory disorders, skin disorders and allergies

TUMORIGENIC DATA:
- Available.

MUTAGENIC DATA:
- Available.

REPRODUCTIVE EFFECTS DATA:
- Available.

ADDITIONAL DATA:
- May cross react with similar compounds.

12. ECOLOGICAL INFORMATION

ECOTOXICITY DATA:
FISH TOXICITY: 2500 ug/L 96 hour(s) LC50 (Mortality) Fathead minnow (Pimephales promelas)

INVERTEBRATE TOXICITY: 12000 ug/L 24 hour(s) LC50 (Mortality) Brine shrimp (Artemia salina)

ENVIRONMENTAL SUMMARY: Toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U113.

14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:
- PROPER SHIPPING NAME: Ethyl acrylate, stabilized
- ID NUMBER: UN1917
- HAZARD CLASS OR DIVISION: 3
- PACKING GROUP: II
- LABELING REQUIREMENTS: 3

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:
15. REGULATORY INFORMATION

U.S. REGULATIONS:
CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):
Ethyl acrylate: 1000 LBS RQ
HYDROQUINONE: 100 LBS RQ


SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370 Subparts B and C):
ACUTE: Yes
CHRONIC: Yes
FIRE: Yes
REACTIVE: Yes
SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65):
Ethyl acrylate


STATE REGULATIONS:
California Proposition 65:
Known to the state of California to cause the following:
Ethyl acrylate
Cancer (Jul 01, 1989)

CANADIAN REGULATIONS:
WHMIS CLASSIFICATION: Not determined.

NATIONAL INVENTORY STATUS:
U.S. INVENTORY (TSCA): Listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CANADA INVENTORY (DSL/NDSL): Not determined.
16. OTHER INFORMATION

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