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: ISOPROPYL CHLORIDE

TRADE NAMES/SYNONYMS:
MTG MSDS 213; 2-CHLOROPROPANE; CHLORODIMETHYLMETHANE; 2-PROPYL CHLORIDE; 2-ISOPROPYL CHLORIDE; PROPANE, 2-CHLORO-; SEC-PROPYL CHLORIDE; PROPYL CHLORIDE;
NARCSOP; ISOPRID; UN 2356; C3H7CL; MAT12110; RTECS TX4410000

CHEMICAL FAMILY: halogenated, aliphatic

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

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: ISOPROPYL CHLORIDE
CAS NUMBER: 75-29-6
PERCENTAGE: 100.0

3. HAZARDS IDENTIFICATION

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

EMERGENCY OVERVIEW:
COLOR: colorless to yellow
PHYSICAL FORM: liquid
ODOR: sweet odor
MAJOR HEALTH HAZARDS: central nervous system depression
PHYSICAL HAZARDS: Flammable liquid and vapor. Vapor may cause flash fire.

POTENTIAL HEALTH EFFECTS:
INHALATION:
SHORT TERM EXPOSURE: irritation, vomiting, irregular heartbeat, headache, drowsiness, symptoms of
drunkenness, visual disturbances, kidney damage, liver damage

LONG TERM EXPOSURE: no information on significant adverse effects

SKIN CONTACT:
SHORT TERM EXPOSURE: no information on significant adverse effects
LONG TERM EXPOSURE: same as effects reported in short term exposure

EYE CONTACT:
SHORT TERM EXPOSURE: no information on significant adverse effects
LONG TERM EXPOSURE: no information is available

INGESTION:
SHORT TERM EXPOSURE: symptoms of drunkenness
LONG TERM EXPOSURE: kidney damage

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. Moderate explosion hazard. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Vapor/air mixtures are explosive. Electrostatic discharges may be generated by flow or agitation resulting in ignition or explosion.

EXTINGUISHING MEDIA: alcohol-resistant foam, carbon dioxide, regular dry chemical, water

Large fires: Use alcohol-resistant 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). Water may be ineffective.
6. ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:
Avoid heat, flames, sparks and other sources of ignition. Remove 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. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.

7. HANDLING AND STORAGE


8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:
ISOPROPYL CHLORIDE:
2-CHLOROPROPANE:
50 ppm AIHA WEEL TWA

VENTILATION: Provide local exhaust or process enclosure 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. 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 supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

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:** colorless to yellow
**ODOR:** sweet odor
**MOLECULAR WEIGHT:** 78.54
**MOLECULAR FORMULA:** (C-H3)2-C-H-CL
**BOILING POINT:** 97 F (36 C)
**FREEZING POINT:** -179 F (-117 C)
**VAPOR PRESSURE:** 521 mmHg @ 25 C
**VAPOR DENSITY (air=1):** 2.7
**SPECIFIC GRAVITY (water=1):** 0.8617
**WATER SOLUBILITY:** 0.344% @ 12.5 C
**PH:** Not available
**VOLATILITY:** Not available
**ODOR THRESHOLD:** Not available
**EVAPORATION RATE:** Not available
**VISCOSITY:** 0.2962 cP @ 22.5 C
**COEFFICIENT OF WATER/OIL DISTRIBUTION:** Not available
**SOLVENT SOLUBILITY:**
Soluble: alcohol, ether, benzene, chloroform

10. STABILITY AND REACTIVITY

**REACTIVITY:** Stable at normal temperatures and pressure.

**CONDITIONS TO AVOID:** Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat.

**INCOMPATIBILITIES:** metals, oxidizing materials

**HAZARDOUS DECOMPOSITION:**
Thermal decomposition products: halogenated compounds, oxides of carbon
POLYMERIZATION: Will not polymerize.

11. TOXICOLOGICAL INFORMATION

ISOPROPYL CHLORIDE:
TOXICITY DATA: 120 gm/m3 inhalation-rat LC50; 5 gm/kg oral-rat LD50
ACUTE TOXICITY LEVEL:
Moderately Toxic: ingestion
Slightly Toxic: inhalation
TARGET ORGANS: central nervous system
MUTAGENIC DATA: Available.
ADDITIONAL DATA: Stimulants such as epinephrine may induce ventricular fibrillation.

12. ECOLOGICAL INFORMATION

Not available

13. DISPOSAL CONSIDERATIONS

Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:
PROPER SHIPPING NAME: 2-Chloropropane
ID NUMBER: UN2356
HAZARD CLASS OR DIVISION: 3
PACKING GROUP: I
LABELING REQUIREMENTS: 3

CANADIAN TRANSPORTATION OF DANGEROUS GOODS:
SHIPPING NAME: 2-Chloropropane
UN NUMBER: UN2356
CLASS: 3
PACKING GROUP/CATEGORY: I

15. REGULATORY INFORMATION
U.S. REGULATIONS:
CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4): Not regulated.


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


STATE REGULATIONS:
California Proposition 65: Not regulated.

CANADIAN REGULATIONS:
WHMIS CLASSIFICATION: BD2

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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