

# MATERIAL SAFETY DATA SHEET

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## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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**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: 5-50 PPM ETHANOL IN AIR**

**TRADE NAMES/SYNONYMS:**  
00224106

**CREATION DATE:** Nov 03 1999  
**REVISION DATE:** Dec 11 2008

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## 2. COMPOSITION, INFORMATION ON INGREDIENTS

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**COMPONENT:** COMPRESSED AIR, BREATHING AIR  
**CAS NUMBER:** 132259-10-0  
**PERCENTAGE:** 99.995-99.9995

**COMPONENT:** ETHYL ALCOHOL  
**CAS NUMBER:** 64-17-5  
**PERCENTAGE:** 0.00050-0.00500

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## 3. HAZARDS IDENTIFICATION

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

**EMERGENCY OVERVIEW:**

**COLOR:** colorless

**PHYSICAL FORM:** gas

**MAJOR HEALTH HAZARDS:** No significant target effects reported.

**PHYSICAL HAZARDS:** Containers may rupture or explode if exposed to heat.

**POTENTIAL HEALTH EFFECTS:**

**INHALATION:**

**SHORT TERM EXPOSURE:** no information on significant adverse effects

**LONG TERM EXPOSURE:** no information on significant adverse effects



**SKIN CONTACT:**

**SHORT TERM EXPOSURE:** no information is available

**LONG TERM EXPOSURE:** no information is available

**EYE CONTACT:**

**SHORT TERM EXPOSURE:** no information is available

**LONG TERM EXPOSURE:** no information is available

**INGESTION:**

**SHORT TERM EXPOSURE:** ingestion of a gas is unlikely

**LONG TERM EXPOSURE:** ingestion of a gas is unlikely

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## 4. FIRST AID MEASURES

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**INHALATION:** If adverse effects occur, remove to uncontaminated area. Get medical attention.

**SKIN CONTACT:** Wash exposed skin with soap and water.

**EYE CONTACT:** Flush eyes with plenty of water.

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

**NOTE TO PHYSICIAN:** Consider need versus risk.

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## 5. FIRE FIGHTING MEASURES

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**FIRE AND EXPLOSION HAZARDS:** Negligible fire hazard. Containers may rupture or explode if exposed to heat.

**EXTINGUISHING MEDIA:** carbon dioxide, regular dry chemical

**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. Do not get water directly on material. Avoid inhalation of material or combustion by-products.

**FLASH POINT:** Not applicable

**LOWER FLAMMABLE LIMIT:** Not applicable

**UPPER FLAMMABLE LIMIT:** Not applicable

**AUTOIGNITION:** Not applicable

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## 6. ACCIDENTAL RELEASE MEASURES

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**OCCUPATIONAL RELEASE:**

Stop leak if possible without personal risk.

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## 7. HANDLING AND STORAGE

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**STORAGE:** Compressed gases can present significant safety hazards. Store cylinders away from heavily trafficked areas and emergency exits. Cylinders should be stored upright (with valve protection cap in place). For additional and specific safe practices consult the following Compressed Gas Association (CGA) publications: P-1 "Safe Handling of Compressed Gases in Cylinders", AV-1 "Safe Handling and Storage of Compressed Gases", and "Compressed Handbook".

**HANDLING: WORK PRACTICES AND HYGIENE PRACTICES:** Though this gas mixture contains sufficient oxygen to sustain life, it must be treated as unfit for human consumption and should not be used in applications requiring breathing air.

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## 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

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**EXPOSURE LIMITS:**

**ETHYL ALCOHOL:**

**ETHYL ALCOHOL (ETHANOL):**

1000 ppm (1900 mg/m<sup>3</sup>) OSHA TWA

1000 ppm ACGIH TWA

1000 ppm (1900 mg/m<sup>3</sup>) NIOSH recommended TWA 10 hour(s)

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

**EYE PROTECTION:** Eye protection not required under normal conditions.

**CLOTHING:** Protective clothing is not required under normal conditions.

**GLOVES:** Protective gloves are not required under normal conditions.

**RESPIRATOR:** Respiratory protection is not generally needed when using this product. Maintain airborne contaminant concentrations below guidelines listed in this Section. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. state standards, or the Canadian CSA Standard Z94.4-93.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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**PHYSICAL STATE:** gas

**COLOR:** colorless

**ODOR:** Not available

**BOILING POINT:** -317 F (-194 C) (AIR, COMPRESSED)

**FREEZING POINT:** Not available

**VAPOR PRESSURE:** 760 mmHg @ -194 C (AIR, COMPRESSED)

**VAPOR DENSITY (air=1):** 1.0 (AIR, COMPRESSED)  
**DENSITY:** Not available  
**WATER SOLUBILITY:** Not available  
**PH:** Not applicable  
**VOLATILITY:** Not applicable  
**ODOR THRESHOLD:** Not available  
**EVAPORATION RATE:** Not applicable  
**COEFFICIENT OF WATER/OIL DISTRIBUTION:** Not applicable

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## 10. STABILITY AND REACTIVITY

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

**CONDITIONS TO AVOID:** Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.

**INCOMPATIBILITIES:** No data available.

**HAZARDOUS DECOMPOSITION:**

Thermal decomposition products: miscellaneous decomposition products

**POLYMERIZATION:** Will not polymerize.

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## 11. TOXICOLOGICAL INFORMATION

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**5-50 PPM ETHANOL IN AIR:**

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** skin disorders

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## 12. ECOLOGICAL INFORMATION

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Not available

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## 13. DISPOSAL CONSIDERATIONS

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Dispose of in accordance with all U.S., Canadian, and European EC regulations. Return cylinders with residual product to Matheson Tri-Gas. Do not dispose of locally.

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## 14. TRANSPORT INFORMATION

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**U.S. DOT 49 CFR 172.101:**  
**PROPER SHIPPING NAME:** Air, compressed  
**ID NUMBER:** UN1002  
**HAZARD CLASS OR DIVISION:** 2.2  
**LABELING REQUIREMENTS:** 2.2

**CANADIAN TRANSPORTATION OF DANGEROUS GOODS:**  
**SHIPPING NAME:** Air, compressed  
**UN NUMBER:** UN1002  
**CLASS:** 2.2

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## 15. REGULATORY INFORMATION

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### 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: No

CHRONIC: No

FIRE: No

REACTIVE: No

SUDDEN RELEASE: Yes

**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:** A.

### NATIONAL INVENTORY STATUS:

**U.S. INVENTORY (TSCA):** Exempt.

**TSCA 12(b) EXPORT NOTIFICATION:** Not listed.

**CANADA INVENTORY (DSL/NDL):** Listed on inventory.

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## 16. OTHER INFORMATION

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