



Tel: 514-956-7503
Fax: 514-956-7504
Internet: www.megs.ca
Email : support@megs.ca

Montreal
Ottawa
Quebec

St-Laurent
Nepean
Quebec

Tel : 514-956-7503
Tel : 613-226-4228
Tel : 418-834-7447

Fax : 514-956-7504
Fax : 613-226-4229
Fax : 418-834-3774

HALOTHANE- MATERIAL SAFETY DATA SHEET

TABLE OF CONTENTS:

1. [Chemical Product and Company Identification](#)
2. [Composition, Information on Ingredients](#)
3. [Hazards Identification](#)
4. [First Aid Measures](#)
5. [Fire Fighting Measures](#)
6. [Accidental Release Measures](#)
7. [Handling and Storage](#)
8. [Exposure Controls, Personal Protection](#)
9. [Physical and Chemical Properties](#)
10. [Stability and Reactivity](#)
11. [Toxicological Information](#)
12. [Ecological Information](#)
13. [Disposal Considerations](#)
14. [Transport Information](#)
15. [Regulatory Information](#)
16. [Other Information](#)

24 Hour EMERGENCY CONTACT

U.S- CHEMTREC 1-800-424-9300

CANADA- CANUTEC 613-996-6666

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

[Up to Table of Contents](#)

Matheson Tri-Gas, Inc.

The telephone numbers listed below are emergency numbers, please contact your local branch for routine inquiries.

USA

959 Route 46 East
Parsippany, New Jersey
07054-0624 USA
Phone: 973-257-1100

CANADA

530 Watson Street
Whitby, Ontario
L1N 5R9 Canada
Phone: 905-668-3570

SUBSTANCE: HALOTHANE

SYMBOL: C₂HBrClF₃

TRADE NAMES/SYNONYMS:

FLUOTHANE (R); 1,1,1-TRIFLUORO-2-CHLORO-2-BROMOETHANE; 2,2,2-TRIFLUORO-1-CHLORO-1-BROMOETHANE; BROMOCHLOROTRIFLUOROETHANE; HALOTAN; FLUOROTANE; OCHALOTHANE; NARCOTANE; 1,1,1-TRIFLUORO-2-BROMO-2-CHLOROETHANE; FLUOTHANE; C2HBRCLF3; MAT10625; RTECS KH6550000

CHEMICAL FAMILY: halogenated, aliphatic

CREATION DATE: Jan 24 1989

REVISION DATE: Mar 16 1999

2. COMPOSITION, INFORMATION ON INGREDIENTS

[Up to Table of Contents](#)

[Contents](#)

COMPONENT: HALOTHANE

CAS NUMBER: 151-67-7

EC NUMBER (EINECS): 205-796-5

PERCENTAGE: 100.0

3. HAZARDS IDENTIFICATION

[Up to Table of Contents](#)

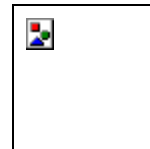
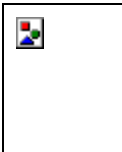
NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=0 REACTIVITY=0

WHMIS CLASSIFICATION: D2

EC CLASSIFICATION (ASSIGNED):

Xi Irritant

R 36-37-38



EMERGENCY OVERVIEW:

Physical Form: liquid

Odor: sweet odor, pleasant odor

Major Health Hazards: respiratory tract irritation, skin irritation, eye irritation

POTENTIAL HEALTH EFFECTS:

INHALATION:

Short Term Exposure: irritation, nausea, vomiting, liver damage

Long Term Exposure: kidney damage, liver damage

SKIN CONTACT:

Short Term Exposure: irritation

Long Term Exposure: same as effects reported in short term exposure

EYE CONTACT:

Short Term Exposure: irritation, tearing

Long Term Exposure: same as effects reported in short term exposure

INGESTION:

Short Term Exposure: same as effects reported in short term inhalation, symptoms of drunkenness

Long Term Exposure: no information on significant adverse effects

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

4. FIRST AID MEASURES

[Up to Table of Contents](#)

INHALATION:

When safe to enter area, remove from exposure. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Keep warm and at rest. Get medical attention immediately.

SKIN CONTACT:

Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT:

Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION:

If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

NOTE TO PHYSICIAN:

For inhalation, consider oxygen.

5. FIRE FIGHTING MEASURES

[Up to Table of Contents](#)

FIRE AND EXPLOSION HAZARDS:

Negligible fire hazard.

EXTINGUISHING MEDIA:

regular dry chemical, carbon dioxide, water, regular 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. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

FLASH POINT:

No data available.

6. ACCIDENTAL RELEASE MEASURES

[Up to Table of Contents](#)

OCCUPATIONAL RELEASE:

Stop leak if possible without personal risk. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry.

7. HANDLING AND STORAGE

[Up to Table of Contents](#)

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

[Up to Table of Contents](#)

[Contents](#)

EXPOSURE LIMITS:

HALOTHANE:

50 ppm (404 mg/m³) ACGIH TWA

2 ppm (16 mg/m³) NIOSH recommended ceiling 1 hour(s) (halogenated anesthetic gas)

VENTILATION: Provide local exhaust ventilation system. 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 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 full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

9. PHYSICAL AND CHEMICAL PROPERTIES

[Up to Table of Contents](#)

PHYSICAL STATE: liquid

ODOR: sweet odor, pleasant odor

MOLECULAR WEIGHT: 197.39

MOLECULAR FORMULA: C₂H₂BrClF₃

BOILING POINT: 122 F (50 C)

FREEZING POINT: Not available

VAPOR PRESSURE: Not available

VAPOR DENSITY: Not available

SPECIFIC GRAVITY (water=1): 1.87

WATER SOLUBILITY: 0.345%

PH: Not available

VOLATILITY: Not available

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not available

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SOLVENT SOLUBILITY:

Soluble: petroleum ether, acetone, ether, benzene, fat solvents

10. STABILITY AND REACTIVITY

[Up to Table of Contents](#)

REACTIVITY:

Stable at normal temperatures and pressure.

CONDITIONS TO AVOID:

Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

INCOMPATIBILITIES:

metals, combustible materials

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: chlorine, halides, halogens, oxides of carbon

POLYMERIZATION:

Will not polymerize.

11. TOXICOLOGICAL INFORMATION

[Up to Table of Contents](#)

HALOTHANE:

IRRITATION DATA:

100 mg eyes-rabbit severe

TOXICITY DATA:

29000 ppm inhalation-rat LC50; 5680 mg/kg oral-rat LD50

CARCINOGEN STATUS:

IARC: Human Inadequate Evidence, Animal Inadequate Evidence, Group 3; ACGIH: A4 -Not Classifiable as a Human Carcinogen

LOCAL EFFECTS:

Irritant: inhalation, skin, eye

ACUTE TOXICITY LEVEL:

Slightly Toxic: inhalation, ingestion

MUTAGENIC DATA:

Available.

REPRODUCTIVE EFFECTS DATA:

Available.

12. ECOLOGICAL INFORMATION

[Up to Table of Contents](#)

Not available

13. DISPOSAL CONSIDERATIONS

[Up to Table of Contents](#)

Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

[Up to Table of Contents](#)

No classification assigned.

15. REGULATORY INFORMATION

[Up to Table of Contents](#)

U.S. REGULATIONS:

TSCA INVENTORY STATUS: N

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): N

SARA SECTION 302 (40CFR355.30): N

SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: Y

CHRONIC: N

FIRE: N

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: Y

Known to the state of California to cause the following:

Halothane

Developmental toxicity (Sep 01, 1996)

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 205-796-5

EC RISK AND SAFETY PHRASES:

R 36	Irritating to eyes.
R 37	Irritating to respiratory system.
R 38	Irritating to skin.
S 2	Keep out of reach of children.
S 24	Avoid contact with skin.
S 25	Avoid contact with eyes.
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 46	If swallowed, seek medical advice immediately and show this container or label.

16. OTHER INFORMATION

[Up to Table of Contents](#)

Matheson Tri-Gas makes no express or implied warranties, guarantees or representations regarding the product or the information herein, including but not limited to any implied

warranty of merchantability or fitness for use. Matheson Tri-Gas shall not be liable for any personal injury, property or other damages of any nature, whether compensatory, consequential, exemplary, or otherwise, resulting from any publication, use or reliance upon the information herein.

©Copyright 1984-1999 MDL Information Systems. ©Copyright 2000 Matheson Tri-Gas. All rights reserved.