

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 831.00

Revision Date: April 2, 2001

Section 1 — Chemical Product and Company Identification

1,1,2-Trichloro-1,2,2-Trifluoroethane

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

1,1,2-Trichloro-1,2,2-Trifluoroethane

Synonym: TTE

CAS#: 76-13-1

Section 3 — Hazards Identification

Colorless, nearly odorless, volatile liquid.

Substance not considered hazardous. However, not all health aspects of this substance have been thoroughly investigated.

FLINN AT-A-GLANCE

Health-0

Flammability-1

Reactivity-0

Exposure-0

Storage-0

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash continuously with fresh water for 15 minutes.

Internal: Do not induce vomiting. Call a physician or poison control at once.

Section 5 — Fire Fighting Measures

Non flammable, non combustible liquid at regular temperatures.

Gas will ignite and burn weakly at 1256 F.

Decomposition releases toxic hydrogen chloride and hydrogen fluoride gas.

Fire Fighting Instructions: Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None established

Section 6 — Accidental Release Measures

Restrict unprotected personnel from area and ventilate area. Contain spill with sand or absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, halogenated hydrocarbons and ethylene oxide. Store in a cool, dry place. Use and dispense in a hood.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 1000 ppm, STEL 1250 ppm (OSHA, NIOSH)

Section 9 — Physical and Chemical Properties

Colorless, nearly odorless, volatile liquid.
Solubility: Immiscible in water, miscible in alcohol and many organic solvents.
Formula: FCCl₂CClF₂
Formula Weight: 187.38

Specific Gravity: 1.42
Melting Point: -35 C
Boiling Point 47-48 C
Vapor Pressure: 284 mm (20 C)
Vapor Density: 2.39

Section 10 — Stability and Reactivity

Avoid contact with finely divided powdered metals, aluminum, magnesium and zinc. Reacts violently with sodium, potassium, calcium and barium.
Shelf Life: Indefinite.

Section 11 — Toxicological Information

Acute effects: N.A.
Chronic effects: N.A.
Target organs: N.A.

ORL-RAT LD50: 43 gm/kg
IHL-RAT LC50: N.A.
SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations.
Flinn Suggested Disposal Method #27j is one option.

Section 14 — Transport Information

Shipping Name: Not regulated
Hazard Class: N/A
UN Number: N/A

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (200-936-1).

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

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