

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 831.00

Revision Date: October 20, 2011

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 volatile liquid. Nearly odorless.

Substance is 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 and 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 or External: Immediately flush with fresh water for at least 15 minutes.

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

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible liquid at regular temperatures.

Gas will ignite and burn weakly at 680 °C

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: $\text{FCCl}_2\text{CCIF}_2$

Formula weight: 187.38

Boiling point: 47-48 °C

Melting point: -35 °C

Specific gravity: 1.42

Vapor density: 2.39

Vapor pressure: 284 mmHg

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, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD_{50} : 43 g/kg

IHL-RAT LC_{50} : N.A.

SKN-RBT LD_{50} : 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 review all federal, state and local regulations that may apply, before proceeding.

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

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**