

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 829.00

Revision Date: September 27, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1,1,1-Trichloroethane

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

1,1,1-Trichloroethane

Synonym: methyl chloroform

CAS#: 71-55-6

SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Chloroform - like odor.

Severe body tissue irritant. Chronic exposure may result in dermatitis. Avoid all body tissue contact.

FLINN AT-A-GLANCE

Health-0

Flammability-1

Reactivity-2

Exposure-1

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: Induce vomiting. After vomiting, give mixture of 2 Tbs. of activated charcoal mixed with one cup of water. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Combustible liquid.

When heated to decomposition, emits toxic chloride fumes.

Upper: 15%, Lower 7.5%; Autoignition Temperature: 998 °F

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

H-2

F-1

R-0

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand or other inert 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. 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 350 ppm, STEL 450 ppm (OSHA, ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Chloroform - like odor.

Solubility: Alcohol, not water.

Formula: CH₂Cl₃

Formula Weight: 133.41

Boiling Point: 74-76 °C

Melting Point: -35 °C

Specific Gravity: 1.325

Vapor Density: 4.6 (Air=1)

Vapor Pressure: 100 mm @ 20 °C

SECTION 10 — STABILITY AND REACTIVITY

Avoid strong oxidizers, aluminum, zinc, magnesium, and strong bases. Reacts violently with potassium, sodium, acetone, nitrates, and oxygen.

Shelf Life: Indefinite.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Harmful liquid, severe irritant

Chronic effects: Dermatitis, possible mutagen

Target organs: Liver, kidneys, central nervous system

ORL-RAT LD₅₀: 10300 mg/kgIHL-RAT LC₅₀: 18000 ppm/4HSKN-RBT LD₅₀: >5 g/kg

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: 1,1,1-Trichloroethane

Hazard Class: 6.1, Keep away from food.

UN Number: UN2831

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-756-3), RCRA code U226.

SECTION 16 — OTHER INFORMATION

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