

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 829.00

Revision Date: November 1, 2011

### 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-3

Reactivity-2

Exposure-1

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: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Class IA flammable liquid.

When heated to decomposition, emits toxic chloride fumes.

Lower 7.5% Upper: 15%; Autoignition Temperature: 537 °C

**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)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless liquid. Chloroform - like odor.

Solubility: Alcohol, not water.

Formula: CH<sub>3</sub>CCl<sub>3</sub>

Formula weight: 133.41

Boiling point: 74-76 °C

Melting point: -35 °C

Specific gravity: 1.325

Vapor density: 4.6

Vapor pressure: 100 mmHg

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**SECTION 10 — STABILITY AND REACTIVITY**

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

Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Harmful liquid, severe irritant

Chronic effects: Dermatitis, possible mutagen

Target organs: Liver, kidneys, central nervous system

ORL-RAT LD<sub>50</sub>: 10300 mg/kgIHL-RAT LC<sub>50</sub>: 18000 ppm/4HSKN-RBT LD<sub>50</sub>: >5 g/kg

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #27j is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: 1,1,1-Trichloroethane

Hazard class: 6.1, Keep away from food.

UN number: UN2831

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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

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**SECTION 16 — OTHER INFORMATION**

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