# FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

**SDS #:** 830.00

**Revision Date:** December 31, 2013

## SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

## Trichloroethylene

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

CHEMTREC Emergency Phone Number: (800) 424-9300 Signal Word DANGER

## Pictograms

#### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

Hazard class: Skin and serious eye damage, corrosion or irritation (Category 2, 2A). Causes skin and serious eye irritation (H315+H319).

Hazard class: Carcinogenicity (Category 1). May cause cancer (H350). Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Use personal protective equipment as required (P281).

Hazard class: Specific target organ toxicity, single exposure (Category 2). May cause damage to organs (H371). Do not eat, drink or smoke when using this product (P270).



SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Trichloroethylene	79-01-6	ClCH:CCl <sub>2</sub>	131.39	
Synonym: 1-chloro-2,2-dichloroethylene				

#### **SECTION 4 — FIRST AID MEASURES**

**If exposed or concerned:** Get medical advice or attention (P308+P313).

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

If on skin: Wash with plenty of water (P302+P352). If skin irritation occurs: Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

## **SECTION 5 — FIRE FIGHTING MEASURES**

Combustible liquid. Has difficulty burning.

Flash point: 32 °C Flammable limits: Lower: 7.8% Upper: 52% Autoignition Temperature: 420 °C

When heated to decomposition, may emit toxic fumes.

In case of fire: Use a tri-class dry chemical fire extinguisher.

R-0

#### **SECTION 6 — ACCIDENTAL RELEASE MEASURES**

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.

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#### **SECTION 7 — HANDLING AND STORAGE**

Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, halogenated hydrocarbons and ethylene oxide. Light sensitive. Slowly decomposes (forming hydrochloric acid) by light in the presence of moisture. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor TM can. Use and dispense in a hood.

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling (P264). Exposure guidelines: PEL 100 ppm, Ceiling 200 ppm (OSHA), TLV 269mg/m<sup>3</sup>, STEL 25 ppm (ACGIH)

## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Chloroform-like odor.

Soluble: Miscible with most organic solvents. Insoluble in water.

Boiling point: 86.9 °C

Melting point: -84 °C

Specific gravity: 1.4904 Vapor density: 4.5

Vapor pressure: 61 mmHg

#### **SECTION 10 — STABILITY AND REACTIVITY**

Avoid oxidizing agents, reducing agents and strong bases. May decompose if exposed to light, aluminum or magnesium. Shelf life: Indefinite, if stored properly. See Section 7 for further information.

#### **SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Harmful vapor, severe irritant, GI disturbances, ORL-RAT LD<sub>50</sub>: 4920 mg/kg

nausea, dizziness, and headache IHL-MUS LC<sub>50</sub>: 8450 ppm/4H

Chronic effects: Dermatitis, mutagen, probable carcinogen. SKN-RBT LD<sub>50</sub>: N.A.

Target organs: Nerves, liver, kidneys, heart, lungs

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: Trichloroethylene. Hazard class: 6.1, Keep away from food. UN number: UN1710.

N/A = Not applicable

#### **SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (201-167-4), RCRA code U228.

#### SECTION 16 — OTHER INFORMATION

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