

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 582.50

Revision Date: March 14, 2001

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### Section 1 — Chemical Product and Company Identification

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## Perchloroethylene

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### Section 2 — Composition, Information on Ingredients

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Perchloroethylene

Synonym: Tetrachloroethylene

CAS#: 127-18-4

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### Section 3 — Hazards Identification

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Clear, colorless liquid. Ether-like odor.

Slightly toxic by ingestion and inhalation. Irritating to body tissues. Possible carcinogen.

Avoid all body contact.

#### FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-1

Exposure-3

Storage-0

0 is low hazard, 3 is high hazard

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### Section 4 — First Aid Measures

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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: Give large quantities of water. Call a physician or poison control at once.

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### Section 5 — Fire Fighting Measures

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Non flammable, non combustible liquid.

When heated to decomposition, emits toxic fumes of Cl.

**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-0

R-0

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### Section 6 — Accidental Release Measures

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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.

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### Section 7 — Handling and Storage

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

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### Section 8 — Exposure Controls, Personal Protection

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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 1002 ppm, STEL 100 ppm (OSHA, ACGIH)

### Section 9 — Physical and Chemical Properties

Clear, colorless liquid. Ether-like odor.  
Solubility: Soluble in alcohol, ether, oils; insoluble in water.  
Formula:  $CCl_2=CCl_2$   
Formula Weight: 165.82

Specific Gravity: 1.6  
Melting Point: -22 C  
Boiling Point: 120-122 C  
Vapor Pressure: 13mm (20 C)  
Vapor Density: 5.83

### Section 10 — Stability and Reactivity

Avoid contact with strong bases, strong acids, acid anhydrides and alcohols.  
Shelf Life: Indefinite.

### Section 11 — Toxicological Information

Acute effects: Harmful liquid and fumes, irritant, nausea, dizziness and headache.  
Chronic effects: Possible carcinogen, mutagen, nerves, heart, liver and kidneys. Target organs: N.A.

ORL-RAT LD50: 1100 mg/kg  
IHL-RAT LC50: 34200 mg/m<sup>3</sup>/8H  
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 #4b is one option.

### Section 14 — Transport Information

Shipping Name: Tetrachloroethylene  
Hazard Class: 6.1, Keep away from food  
UN Number: UN1897

N/A = Not applicable

### Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (204-825-9), RCRA code U210.

### 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.

**FLINN SCIENTIFIC INC.**

"Your Safer Source for Science Supplies"

*Reduce Science Accidents--  
Use Flinn Chemicals*

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