

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 810.00

Revision Date: July 13, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Tetrahydrofuran

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

Tetrahydrofuran

Synonym: THF

CAS#: 109-99-9

SECTION 3 — HAZARDS IDENTIFICATION

Water-white liquid. Ether-like odor.

Slightly toxic by ingestion and inhalation. Irritating to skin and respiratory system.

Avoid all body tissue contact and inhalation of fumes.

Flammable liquid. Extremely dangerous fire risk.

FLINN AT-A-GLANCE

Health-1

Flammability-3

Reactivity-1

Exposure-1

Storage-3

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 IB flammable liquid. Extremely dangerous fire risk.

Flash point: -17 °C Flammable limits: Lower: 1.8% Upper: 11.8% Autoignition Temperature: 321 °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-3

R-1

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. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor Can.

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 200 ppm, STEL 250 ppm (OSHA, NIOSH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Water-white liquid with ether odor.
Solubility: Water and organic solvents.
Formula: $\text{-CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{O-}$
Formula weight: 72.12

Boiling point: 65.5-66.5 °C
Melting point: -108.5 °C
Specific gravity: 0.888
Vapor density: 2.5
Vapor pressure: 143 mmHg

SECTION 10 — STABILITY AND REACTIVITY

Forms explosive peroxides in air, do not distill to dryness. Avoid contact with acids, bases, oxidizing agents and oxygen.
Shelf life: Indefinite, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Irritant, coughing, chest pains, difficulty breathing, nausea, dizziness, and headache
Chronic effects: N.A.
Target organs: Blood, CNS, skin, eyes

ORL-RAT LD₅₀: 1650 mg/kg
IHL-RAT LC₅₀: 21000 ppm/3H
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 review all federal, state and local regulations that may apply, before proceeding.
Flinn Suggested Disposal Method #15 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Tetrahydrofuran
Hazard class: 3, Flammable liquid
UN number: UN2056
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (203-726-8), RCRA code U213.

SECTION 16 — OTHER INFORMATION

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