

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 509.50

Revision Date: July 8, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Methyl-t-Butyl Ether

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

Methyl-t-butyl ether

Synonym: MTBE

CAS#: 1634-04-4

SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Sweet odor; volatile.

Slightly toxic by ingestion.

Flammable liquid.

FLINN AT-A-GLANCE

Health-1

Flammability-3

Reactivity-0

Exposure-0

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 1A flammable liquid.

Flash point: -10 °C Flammable limits: Lower: 1.6% Upper: 8.4% Autoignition Temperature: 160 °C

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None

established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Remove all ignition sources and ventilate area. Contain the spill with sand or absorbent material and deposit in a 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 a 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 a 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 40 ppm (ACGIH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Sweet odor. Volatile.

Solubility: Soluble in alcohol, chloroform, and ethyl ether. Slightly soluble in water.

Formula: $\text{CH}_3\text{OC}(\text{CH}_3)_3$

Formula weight: 88.17

Boiling point: 53 °C

Melting point: -109 °C

Specific gravity: 0.745

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with strong oxidizers and heat.

Shelf life: Good, if stored properly.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A.

Chronic effects: N.A.

Target organs: Skin, eyes.

ORL-RAT LD_{50} : 3865 mg/kg

IHL-RAT LC_{50} : 33,427 ppm

SKN-RBT LD_{50} : >10,000 mg/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 review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Methods #15 is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Methyl tert-Butyl Ether

Hazard class: 3, Flammable Liquid

UN number: UN2398

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (211-309-7), RCRA code D001.

SECTION 16 — OTHER INFORMATION

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