

# FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

## Material Safety Data Sheet (MSDS)

MSDS #: 509.50

Revision Date: November 25, 2002

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### Section 1 — Chemical Product and Company Identification

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## Methyl-t-Butyl Ether

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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Methyl-t-butyl Ether

Synonym: MTBE

CAS#: 1634-04-4

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### Section 3 — Hazards Identification

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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

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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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Class 1A Flammable liquid.

Flash Point: 14 F Upper: 8.4% Lower: 1.6% Autoignition Temperature: 320 F

**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

None Established

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### Section 6 — Accidental Release Measures

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Restrict unprotected personnel from area. Remove all ignition sources and ventilate area. Contain spill with sand and 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.

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.

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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 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: CH<sub>3</sub>OC(CH<sub>3</sub>)<sub>3</sub>  
Formula Weight: 88.17

Specific Gravity: 0.745  
Melting Point: -109 C  
Boiling Point: 53 C

### Section 10 — Stability and Reactivity

Avoid contact with strong oxidizers and heat.  
Shelf life: Good

### Section 11 — Toxicological Information

Acute effects: N.A.  
Chronic effects: N.A.  
Target organs: Skin, eyes

ORL-RAT LD50: 3865 mg/kg  
IHL-RAT LC50: 33,427 ppm  
SKN-RBT LD50: >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 consult with state and local regulations.  
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

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.**

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