





SDS #: 324

Revision Date: September 22, 2014

## Ethyl Ether Safety Data Sheet (SDS)

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Ethyl Ether

Signal Word  
DANGER

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261  
Chemtrec Emergency Phone Number: (800) 424-9744

Pictograms

### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 1). Extremely flammable liquid and vapor (H224). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).



Hazard class: Acute toxicity, oral (Category 4). Harmful if swallowed (H302). Do not eat, drink or smoke when using this product (P270).



Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316).

Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

Hazard class: Acute toxicity, inhalation (Category 5). May be harmful if inhaled (H333).

Hazard class: Specific target organ toxicity, single exposure; Narcotic effects (Category 3). May cause drowsiness or dizziness (H336). Avoid breathing mist, vapors or spray (P261).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Ethyl ether contains a peroxide inhibitor	60-29-7	C <sub>2</sub> H <sub>5</sub> OC <sub>2</sub> H <sub>5</sub>	74.12	
Synonyms: Diethyl ether				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell or if skin and eye irritation occurs (P312+P332+P313+P337).

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing (P304+P340).

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338).

**If on skin or hair:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth (P330). Call a POISON CENTER or physician if you feel unwell (P301+P312).

### SECTION 5 — FIRE FIGHTING MEASURES

Class 1A flammable liquid.

NFPA Code

Flash point: -45 °C Lower: 1.9% Upper: 36.0% Autoignition Temperature: 180 °C

H-1

F-4

Severely flammable liquid; old ether may develop explosive peroxides.

In case of fire: Use a tri-class dry chemical fire extinguisher. (P370+P378).

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## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a 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, and halogenated hydrocarbons. Keep container tightly closed (P233). Keep cool (P235). Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor™ can. Use only in a hood (P271). Avoid storing this substance longer than 3 to 6 months. Buy and store only small quantities. Abide by label expiration date. Never store this substance in an ordinary household refrigerator.

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## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: PEL/TLV 400 ppm (OSHA, ACGIH), Ceiling 500 ppm (ACGIH)

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## SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

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Colorless liquid. Sweet, pungent odor.

Boiling point: 34.5 °C

Soluble: Most organic solvents. Slightly in water.

Melting point: -116 °C

Refractive index: 1.3526

Specific gravity: 0.7138

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## SECTION 10 — STABILITY AND REACTIVITY

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Avoid contact with oxidizers and heat.

Shelf life: Poor. Avoid prolonged storage. Forms explosive peroxides upon aging.

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## SECTION 11 — TOXICOLOGICAL INFORMATION

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Acute effects: Skin, eye, respiratory tract irritation, dizziness, drowsiness.

ORL-RAT LD<sub>50</sub>: 1215 mg/kg

IHL-MUS LC<sub>50</sub>: 31,000 ppm/30 min

Chronic effects: Possible mutagen, dizziness, drowsiness, headache, excitation, mental disturbances.

SKN-RBT LD<sub>50</sub>: N.A.

Target organs: Central nervous system.

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## SECTION 12 — ECOLOGICAL INFORMATION

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Data not yet available.

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## SECTION 13 — DISPOSAL CONSIDERATIONS

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #15 is one option.

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## SECTION 14 — TRANSPORT INFORMATION

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Shipping name: Diethyl ether. Hazard class: 3, Flammable Liquid. UN number: UN1155

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## SECTION 15 — REGULATORY INFORMATION

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TSCA-listed, EINECS-listed (200-467-2), RCRA code U117.

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## SECTION 16 — OTHER INFORMATION

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N.A. = Not available, not all health aspects of this substance have been fully investigated.

N/A = Not applicable

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

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