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

SECTION 2 — HAZARDS IDENTIFICATION

Pictograms

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 orirritation (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 Synonyms: Diethyl ether	60-29-7	$C_2H_5OC_2H_5$	74.12	

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

NFPA Code
H-1
F-4

Severely flammable liquid; old ether may develop explosive peroxides. R-1
In case of fire: Use a tri-class dry chemical fire extinguisher. (P370+P378).

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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.

SECTION 7 — HANDLING AND STORAGE

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.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Sweet, pungent odor.
Soluble: Most organic solvents. Slightly in water.

Boiling point: 34.5 °C
Melting point: -116 °C
Refractive index: 1.3526
Specific gravity: 0.7138

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizers and heat.
Shelf life: Poor. Avoid prolonged storage. Forms explosive peroxides upon aging.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Skin, eye, respiratory tract irritation, dizziness, drowsiness.
Chronic effects: Possible mutagen, dizziness, drowsiness, headache, excitation, mental disturbances.
Target organs: Central nervous system.

ORL-RAT LD_{50}: 1215 mg/kg
IHL-MUS LC_{50}: 31,000 ppm/30 min
SKN-RBT LD_{50}: N.A.

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

SECTION 15 — REGULATORY INFORMATION

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

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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