

FLINN SCIENTIFIC, INC.

Safety Data Sheet (SDS)

SDS #: 324.00

Revision Date: December 13, 2013

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Ethyl Ether

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

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 ₂ H ₅ OC ₂ H ₅	74.12	
Synonym: 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. 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

Severely flammable liquid; old ether may develop explosive peroxides.

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

NFPA CODE

H-1

F-4

R-1

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, halogenated hydrocarbons, and ethylene oxide. 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 3–6 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 thoroughly after handling (P264). Use ventilation to keep airborne concentrations below exposure limits.

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.

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

ORL-RAT LD₅₀: 1215 mg/kg

IHL-MUS LC₅₀: 31,000 ppm/30 min

SKN-RBT LD₅₀: 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

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

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

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) 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. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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