

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 326.00

Revision Date: November 1, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Ethyl Alcohol

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

Ethyl alcohol

Synonym: ethanol

CAS#: 64-17-5

### SECTION 3 — HAZARDS IDENTIFICATION

Clear liquid. Strong alcohol odor.

Toxic by ingestion and inhalation. Body tissue irritant. Avoid all body tissue contact. Denatured with isopropanol and methanol. Not sold for human consumption.

Flammable liquid.

#### FLINN AT-A-GLANCE

Health-3

Flammability-3

Reactivity-1

Exposure-1

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 IB flammable liquid.

Flash point: 9 °C Flammable limits: Lower: 3.3% Upper: 24.5% Autoignition Temperature: 362 °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

H-2

F-3

R-0

### 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 #2. Store with alcohols, glycols, amines, and amides.

Use and dispense in a hood.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.

### 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: PEL 1000 ppm (OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Clear liquid with a strong alcohol odor.  
Solubility: Miscible with water and many organic solvents.  
Formula: C<sub>2</sub>H<sub>5</sub>OH  
Formula weight: 46.07

Boiling point: 78 °C  
Melting point: -114 °C  
Refractive index: 1.3611  
Specific gravity: 0.7893

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia, moisture, heat, open flame, or any source of ignition.  
Shelf life: Excellent, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Poison, irritant, nausea, dizziness, headache.  
Chronic effects: N.A.  
Target organs: Eyes, liver, kidneys, nerves.

ORL-RAT LD<sub>50</sub>: 7060 mg/kg  
IHL-RAT LC<sub>50</sub>: 20000 ppm/10H  
SKN-RBT LD<sub>50</sub>: N.A.

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

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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 #26b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Ethyl alcohol solution  
Hazard class: 3, Flammable liquid  
UN number: UN1170  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (200-578-6), RCRA code D001.

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**SECTION 16 — OTHER INFORMATION**

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