# FLINN SCIENTIFIC, INC. Material Safety Data Sheet (MSDS)

**MSDS #:** 326.00

**Revision Date:** July 9, 2010

#### 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 with a strong alcohol odor.

Toxic by ingestion and inhalation. Body tissue irritant. Avoid all body tissue contact. Denatured with isopropanol and methanol. Not 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: Immediately flush with fresh water for at least 15 minutes.

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, and induce vomiting. Call a physician or poison control at once.

# **SECTION 5 — FIRE FIGHTING MEASURES**

Class IB flammable liquid.	NFPA CODE
Flash Point: 48 °F Upper: 24.5% Lower: 3.3% Autoignition Temperature: 683 °F	H-2
Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and	F-3
SCBA with full facepiece operated in positive pressure mode.	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: TWA 1000 ppm (OSHA)

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# **SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Clear liquid with a strong alcohol odor. Specific Gravity: 0.785 Solubility: Miscible with water and many organic solvents. Melting Point:  $-130\,^{\circ}\text{C}$  Formula:  $\text{C}_2\text{H}_5\text{OH}$  Boiling Point:  $78\,^{\circ}\text{C}$ 

Formula Weight: 46.07

# **SECTION 10 — STABILITY AND REACTIVITY**

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 safely.

# **SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Poison, irritant, nausea, dizziness, headache.

ORL-RAT LD<sub>50</sub>: 7060 mg/kg

Chronic effects: N.A.

IHL-RAT LC<sub>50</sub>: 20000 ppm/10H

Target organs: Eyes, liver, kidneys, nerves. SKN-RBT LD<sub>50</sub>: N.A.

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 Method #26b is one option.

# **SECTION 14 — TRANSPORT INFORMATION**

Shipping Name: Ethyl alcohol Hazard Class: 3, Flammable liquid

UN Number: UN1170 N/A = Not applicable

# **SECTION 15 — REGULATORY INFORMATION**

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

# **SECTION 16 — OTHER INFORMATION**

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