

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 330.00

Revision Date: July 9, 2010

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Ethylene Glycol

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

Ethylene glycol

Synonym: 1,2 ethanediol

CAS#: 107-21-1

### SECTION 3 — HAZARDS IDENTIFICATION

Viscous, colorless liquid. Sweet odor like antifreeze.

Moderately toxic by ingestion and skin absorption. Skin, eye, and mucous membrane irritant. Avoid all body tissue contact. Avoid inhaling toxic fumes.

Combustible.

#### FLINN AT-A-GLANCE

Health-2

Flammability-1

Reactivity-1

Exposure-2

Storage-1

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: Induce vomiting. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Combustible liquid.

Flash Point: 232 °F Upper: 15.3% Lower: 3.2% Autoignition Temperature: 752 °F

When heated to decomposition, emits acrid smoke and irritating fumes.

**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-1

F-1

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area 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.

Store in a cool, dry place. Deliquescent; store in Flinn Chem-Saf Bag. Use and dispense in a hood.

### 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 exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Viscous, colorless liquid with a sweet odor like antifreeze.  
Solubility: Water soluble.  
Formula: HOCH<sub>2</sub>CH<sub>2</sub>OH  
Formula Weight: 62.08

Specific Gravity: 1.1153  
Melting Point: -13 °C  
Boiling Point: 196-198 °C

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid contact with strong oxidizers, strong bases, heat, open flame, or any source of ignition.  
Shelf life: Fair. Substance is hygroscopic.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Toxic, irritant, nausea, headache, vomiting.  
Chronic effects: Reproductive hazard.  
Target organs: Liver, kidneys, central nervous system.

ORL-RAT LD<sub>50</sub>: 4700 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
SKN-RBT LD<sub>50</sub>: 9530 mg/kg

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 consult with state and local regulations.  
Flinn Suggested Disposal Method #18b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping Name: Not regulated  
Hazard Class: N/A  
UN Number: N/A  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (203-473-3).

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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.**