

#21 Caboll

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 592.00

Revision Date: February 2, 2012

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Phenolphthalein Alcohol Solution

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

Phenolphthalein (77-09-8) 1% and Ethyl alcohol (64-17-5) 99%.

CAS#: None established

### SECTION 3 — HAZARDS IDENTIFICATION

Colorless, clear solution in neutral or acid solution. Pink to deep red in the presence of alkali, but colorless, again, in the presence of a large amount of alkali. Odor of alcohol.  
Phenolphthalein is a possible human carcinogen (IARC-2B).  
Contains denatured ethyl alcohol. Toxic by ingestion and inhalation. Irritating to body tissues. Avoid all body tissue contact. Flammable liquid.

#### FLINN AT-A-GLANCE

Health-1  
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 due to ethyl alcohol content.  
Flash point: 9 °C Flammable limits: Lower: 3.3% Upper: 24.5% Autoignition Temperature: 362 °C  
**Fire Fighting Instructions:** Use 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 area. Remove all ignition sources and ventilate area. Contain spill with sand or other inert absorbent material; deposit in sealed bag or container. See Sections 8 and 13 for further information.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #9. Store with dyes, indicators, and stains.  
Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.  
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 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 (as ethyl alcohol) (OSHA)

---

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

---

Colorless, clear solution in neutral or acid solution.

Boiling point: 78 °C (ethyl alcohol)  
Melting point: -114 °C (ethyl alcohol)  
Specific gravity: 0.7893 (ethyl alcohol)  
Acid-base indicator: pH 8.2 colorless - 10 pink

---

**SECTION 10 — STABILITY AND REACTIVITY**

---

Avoid contact with oxidizers, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia, moisture, heat, open flames, or any source of ignition.

Shelf life: Indefinite, if stored properly.

---

**SECTION 11 — TOXICOLOGICAL INFORMATION**

---

Acute effects: Irritant, nausea, poison, dizziness, headache

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

Chronic effects: Phenolphthalein is a possible carcinogen.

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

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 review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #18b is one option.

---

**SECTION 14 — TRANSPORT INFORMATION**

---

Shipping name: Ethyl alcohol solution

Hazard class: 3, Flammable liquid

UN number: UN1170

N/A = Not applicable

---

**SECTION 15 — REGULATORY INFORMATION**

---

Not listed.

---

**SECTION 16 — OTHER INFORMATION**

---

This Material Safety Data Sheet (MSDS) 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.**