

# PHENOLPHTHALEIN INDICATOR SOLUTION

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## 1. Product Identification

**Synonyms:** 3,3-Bis(4-hydroxy-phenyl)-1-(3H)-isobenzofuranone Solution, 1% (phenolphthalein, 1% alcoholic solution)

**CAS No.:** 7439-97-6

**Molecular Weight:** N/A Mixture

**Chemical Formula:**  $C_{20}H_{14}O_4 + C_2H_5OH$

**Product Codes:** CHEM-025 and others

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Phenolphthalein	77-09-8	1%	No
Ethanol	64-17-5	99%	Yes

## 3. Hazards Identification

### Hazard Overview

May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be absorbed through the skin. May be harmful if swallowed.  
Flammable.

### SAF-T-DATA<sup>(tm)</sup> Ratings

**Health Rating:** 2 - Moderate (Cancer)

**Flammability Rating:** 3 - Severe (Flammable)

**Reactivity Rating:** 1 - Slight

**Contact Rating:** 3 - Severe (Life)

**Lab Protective Equip:** GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER

**Storage Color Code:** Red (Flammable)

## 4. First Aid Measures

### Inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

### Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

## **Eyes**

In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

## **Ingestion**

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

## **Notes to Physician**

Not Applicable

## **5. Fire Fighting Measures**

**Flash Point/Range (F):** 70

**Flash Point/Range (C):** 21

**Flash Point Method:** PMCC

**Autoignition Temperature (F):** Not Determined

**Autoignition Temperature (C):** Not Determined

**Flammability Limits in Air - Lower (%):** Not Determined

**Flammability Limits in Air - Upper (%):** Not Determined

### **Fire Extinguishing Media**

Carbon Dioxide, Dry Chemicals, Foam.

### **Special Exposure Hazards**

May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode

in fire. Decomposition in fire may produce toxic gases. Vapors are heavier than air and may accumulate in low areas.

Vapors may travel along the ground to be ignited at distant locations.

### **Special Protective Equipment for Fire-Fighters**

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

**NFPA Ratings:** Health 1, Flammability 3, Reactivity 0

**HMIS Ratings:** Flammability 3, Reactivity 0, Health 1

## **6. Accidental Release Measures**

### **Personal Precautionary Measures**

Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.

### **Environmental Precautionary Measures**

Prevent from entering sewers, waterways or low areas.

### **Procedure for Cleaning/Absorption**

Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools.

Contain spill with sand or other inert materials. Scoop up and remove.

## **7. Handling and Storage**

### **Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

### **Storage Information**

Store away from oxidizers. Store in a cool, dry location. Keep from heat, sparks, and open flames.

Keep container closed when not in use.

## 8. Exposure Controls/Personal Protection

### Engineering Controls

Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation. Local exhaust ventilation designed for explosive atmospheres.

### Respiratory Protection

Organic vapor respirator.

### Hand Protection

Impervious rubber gloves.

### Skin Protection

Rubber apron.

### Eye Protection

Chemical goggles; also wear a face shield if splashing hazard exists.

### Other Precautions

Eyewash fountains and safety showers must be easily accessible.

## 9. Physical and Chemical Properties

**Physical State:** Liquid

**Color:** Clear colorless

**Odor:** Alcohol

**pH:** Not Determined

**Specific Gravity @ 20° C (Water=1):** Not Determined

**Density @ 20° C (lbs./gallon):** Not Determined

**Bulk Density @ 20° C (lbs/ft<sup>3</sup>):** Not Determined

**Boiling Point/Range (F):** Not Determined

**Boiling Point/Range (C):** Not Determined

**Freezing Point/Range (F):** Not Determined

**Freezing Point/Range (C):** Not Determined

**Vapor Pressure @ 20° C (mmHg):** Not Determined

**Vapor Density (Air=1):** Not Determined

**Percent Volatiles:** 99%

**Evaporation Rate (Butyl Acetate=1):** Not Determined

**Solubility in Water (g/100ml):** Soluble

**Solubility in Solvents (g/100ml):** Not Determined

**Solubility in Sea Water (g/100ml):** Not Determined

**VOCs (lbs./gallon):** Not Determined

**Viscosity, Dynamic @ 20° C**

**(centipoise):** Not Determined

**Viscosity, Kinematic @ 20° C**

**(centistrokes):** Not Determined

**Partition Coefficient/n-Octanol/Water:** Not Determined

**Molecular Weight (g/mole):** Not Determined

## 10. Stability and Reactivity

**Stability Data:** Stable

**Hazardous Polymerization:** Will Not Occur

### Conditions to Avoid

Keep away from heat, sparks and flame.

### Incompatibility (Materials to Avoid)

Stainless steel.

### **Hazardous Decomposition Products**

Carbon monoxide and carbon dioxide.

### **Additional Guidelines**

Not Applicable

## **11. Toxicological Information**

### **Principle Route of Exposure**

Eye or skin contact, inhalation.

### **Inhalation**

May cause respiratory irritation. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

### **Skin Contact**

May be absorbed through the skin and contribute to the symptoms listed under ingestion. May cause skin defatting with prolonged exposure. Can dry skin.

### **Eye Contact**

May cause eye irritation.

### **Ingestion**

May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation and central nervous system depression.

### **Aggravated Medical Conditions**

Skin disorders.

### **Chronic Effects/Carcinogenicity**

Repeated overexposure may cause liver and kidney effects.

### **Other Information**

None known.

### **Toxicity Tests**

**Oral Toxicity:** Not determined

**Dermal Toxicity:** Not determined

**Inhalation Toxicity:** Not determined

**Primary Irritation Effect:** Not determined

### **Carcinogenicity**

Not determined

**Genotoxicity:** Not determined

**Reproductive/Developmental**

**Toxicity:** Not determined

## **12. Ecological Information**

### **Mobility (Water/Soil/Air)**

Not determined

### **Persistence/Degradability**

Not determined

### **Bio-accumulation**

Not Determined

### **Ecotoxicological Information**

#### **Acute Fish Toxicity:**

Not determined

#### **Acute Crustaceans Toxicity:**

Not determined

**Acute Algae Toxicity:**

Not determined

**Chemical Fate Information**

Not determined

**Other Information**

Not applicable

## 13. Disposal Considerations

**Disposal Method**

Disposal should be made in accordance with federal, state and local regulations.

**Contaminated Packaging**

Follow all applicable national or local regulations.

## 14. Transport Information

**Land Transportation****DOT**

Ethanol Solution, 3, UN1170, II

NAERG 129

**Canadian TDG**

Ethanol Solution, 3, UN1170, II

**ADR**

1170, Ethanol Solution, 3, Item 3(b), ADR

**Air Transportation****ICAO/IATA**

Ethanol Solution, 3, UN1170, II

**Sea Transportation****IMDG**

Ethanol, 3.2, UN1170, II, (21.1 C)

EMS 3-06

**Other Shipping Information**

Labels: Flammable Liquid

## 15. Regulatory Information

**US Regulations****US TSCA Inventory**

All components listed on inventory.

**EPA SARA Title III Extremely Hazardous Substances**

Not applicable

**EPA SARA (311,312) Hazard Class**

Acute Health Hazard

Chronic Health Hazard

Fire Hazard

**EPA SARA (313) Chemicals**

This product contains toxic chemical(s) listed below which is(are) subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372: Ethanol//64-17-5

**EPA CERCLA/Superfund Reportable Spill Quantity For This Product**

Not applicable.

**EPA RCRA Hazardous Waste Classification**

If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of: Ignitability

**California Proposition 65**

The California Proposition 65 regulations apply to this product.

**MA Right-to-Know Law**

One or more components listed.

**NJ Right-to-Know Law**

One or more components listed.

**PA Right-to-Know Law**

One or more components listed.

**Canadian Regulations**

**Canadian DSL Inventory**

All components listed on inventory.

**WHMIS Hazard Class**

B2 Flammable Liquids

D2B Toxic Materials

**16. Other Information**

**References:** Not available.

**Other Special Considerations:** Not available.

**Product Use:**

Laboratory Reagent and Consumer Hobby

**Revision Information:**

No Changes.

**Disclaimer:**

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