

SECTION I NAME

PHENOPHTHALEIN SOLUTION

Product	PHENOPHTHALEIN SOLUTION
Chemical Synonyms	Phenolphthalein ph indicator
Formula	(C ₂₀ H ₁₄ O ₅) ₂ C ₂₀ H ₁₄ O ₅
Unit(s) Size	100, 500 ml, 1 liter
C.A.S. No.	77-09-8

CHEMTREC 800-424-9300 Day 716-226-6177 Night 716-334-4222		Health	3
NFPA HAZARD RATING		Fire	3
LEAD	0	MODERATE	2
FLIGHT	1	HIGH	3
EXTREME	4		

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	Phenolphthalein	%	TLV Units
	2-Propanol (Isopropyl Alcohol)	1%	See Section V
		99%	

WARNING! FLAMMABLE-HARMFUL IF SWALLOWED.

SECTION III PHYSICAL DATA

Melting Point (°F)	-89°C (1PA)	Specific Gravity (H ₂ O = 1)	0.7854 at 20°/4°C
Boiling Point (°F)	82.3°C (1PA)	Percent Volatile by Volume (%)	99%
Vapor Pressure (mm Hg)	33 at 20°C (1PA)	Evaporation Rate (Ether = 1)	Greater than 1
Vapor Density (Air = 1)	2.07 (1PA)		
Solubility in Water	Complete		
Appearance and Odor	Clear colorless liquid; sweet pleasant odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Fish Point (Method Used)	55°C (Isopropyl) Alc.)	Flammable Limits in Air (% by Volume (1PA))	Lower 6% Upper 12%
Extinguisher Media	Dry chemical (ABC); Carbon dioxide (CO ₂); alcohol foam.		

SPECIAL FIREFIGHTING PROCEDURES

In fire conditions, wear a NIOSH-approved self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire or excessive heat may produce hazardous decomposition products; can react vigorously with oxidizing materials.

Autoignition temperature: 852°F

D.O.T. FLAMMABLE LIQUID, N.O.S.



FREY SCIENTIFIC

905 HICKORY LANE MANSFIELD OHIO 44905

MSDS No. Effective Date

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

None established for Phenolphthalein. (ACGIH 1983-84) Isopropyl alcohol (CAS No. 67-63-0) TLV: 400 ppm; 980 mg/m³ (T₁).

Effects of Overexposure

INHALATION: Exposure to high vapor concentrations. (> 400 ppm) may cause eye, nose and throat irritation. Exposure to excessively high concentrations may cause anorexia (drowsiness, sleepiness, etc.)
EYES: Irritation may cause irritation.
SKIN: Prolonged or repeated skin contact may cause skin irritation; drying, cracking and dermatitis if swallowed.
INGESTION: Harmful if swallowed.

Emergency and First Aid Procedures

INGESTION: If swallowed, if conscious, give one or two glasses of water to drink. Induce vomiting and call physician.
INHALATION: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms persist.
EYES: Immediately flush eyes with plenty of water and get medical attention if symptoms persist.
SKIN: Flush with plenty of water.



SECTION VI REACTIVITY DATA

Stability

Unstable
Stable

Incompatibility (Materials to avoid)

Strong oxidizers.

Hazardous Decomposition Products

Combustion will produce carbon dioxide and probably carbon monoxide.

Hazardous Polymerization

Will Not Occur

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Remove all sources of sparks or flame. Add absorbent (sand, earth, sandust, vermiculite) to spill area. Wash spill area with soap and water.

Waste Disposal Method

Dispose of in an approved incinerator or contract with a licensed waste disposal service.

SECTION VIII SPECIAL PROTECTION INFORMATION

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

Respiration Protection

None needed in normal laboratory handling. At elevated temperatures or if misty conditions prevail, work in a ventilation hood or wear a NIOSH-approved respirator.

Ventilation

Local Exhaust
Mechanical (General)

Not needed
Not needed

Protective Gloves

Rubber

Eye Protection
Chemical safety glasses.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing

Do not handle or store near heat, sparks, flame or strong oxidants. Wash thoroughly after handling.

Other Precautions

Read label on container before using.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. 1/12/88 Approved *Wanda L. P. ...* Chemical Safety Coordinator

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