

SAFETY DATA SHEET (SDS)

Phenolphthalein

Issue date: 05-06-2024

Section 1: Product Identifier and Chemical Identity

Product Identifier	
Product Name:	Phenolphthalein solution
Product Codes:	FS30.10 FS30.10RF
Other means of identification:	
External product name and code/s:	C90019
Manufacturer:	
Carolina Biological Supply Company	2700 York Road, Burlington, North Carolina, 27215, USA Website: www.carolina.com
Suppliers name, address and phone number	
Suppliers Name:	Southern Biological
Suppliers ABN:	94 630 703 810
Suppliers Address:	168 Fulham Road Alphington Victoria 3078 Australia
Suppliers Phone No.:	1300 138 561
Emergency Phone number (BH)	1300 138 561

Safety Data Sheet

Phenolphthalein, 0.5% in 50% Ethanol

CAROLINA[®]
www.carolina.com

Section 1 Product Description

Product Name: Phenolphthalein, 0.5% in 50% Ethanol
Recommended Use: Science education applications
Synonyms: Phenolphthalein pH Indicator Solution
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER



Highly flammable liquid and vapor. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs. Toxic to aquatic life.

GHS Classification:

Carcinogenicity Category 1A, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1, Flammable Liquid Category 2, Reproductive Toxicity Category 2, Hazardous to the aquatic environment - Acute Category 2

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.
IF exposed: Call a POISON CENTER or doctor/physician.

Acute Toxicity Oral Contains 43.23525 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Dermal Contains 45.62325 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Vapor Contains 43.23525 % of the mixture consists of ingredient(s) of unknown toxicity
Acute Toxicity Inhalation Dust/Mist Contains 43.23525 % of the mixture consists of ingredient(s) of unknown toxicity

Section 3 Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Water	7732-18-5	52.25
Ethyl alcohol	64-17-5	52.24
Isopropyl Alcohol	67-63-0	2.39
Methanol	67-56-1	2.25
Phenolphthalein	77-09-8	2.14
		0.5

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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Section 5 Firefighting Procedures

Extinguishing Media:	Water fog in flooding quantities. Apply water from as far a distance as possible.
Fire Fighting Methods and Protection:	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards:	Vapors may travel back to ignition source. Closed Containers exposed to heat may explode. Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products:	Carbon dioxide, Carbon monoxide

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:	No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Ventilate the contaminated area. Evaporation of volatile substances can lead to the displacement of air creating an environment that can cause asphyxiation. Isolate area. Keep unnecessary personnel away. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.
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Section 7 Handling and Storage

Handling:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.
Storage:	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Suitable for any general chemical storage.
Storage Code:	Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Ethyl alcohol	N/A	1000 ppm STEL	1000 ppm TWA; 1900 mg/m3 TWA	N/A
Isopropyl Alcohol	200 ppm TWA	400 ppm STEL	400 ppm TWA; 980 mg/m3 TWA	N/A
Methanol	200 ppm TWA	250 ppm STEL	200 ppm TWA; 260 mg/m3 TWA	N/A
Phenolphthalein	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures:	Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.
Personal Protective Equipment (PPE):	Lab coat, apron, eye wash, safety shower.
Respiratory Protection:	No respiratory protection required under normal conditions of use.
Respirator Type(s):	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
Eye Protection:	Wear chemical splash goggles when handling this product. Have an eye wash station available.
Skin Protection:	Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Gloves:	Nitrile

Section 9 Physical Data

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Formula: See Section 3
Molecular Weight: No Data Available
Appearance: Colorless Liquid
Odor: Moderate Alcohol Odor
Odor Threshold: No data available
pH: No data available
Melting Point: No data available -114 C
Boiling Point: Estimated 80 C 79 C
Flash Point: Estimated 24 C 17 C
Flammable Limits in Air: Ethyl alcohol: 3.3 - 19%

Vapor Pressure: No Data Available
Evaporation Rate (BuAc=1): No Data Available
Vapor Density (Air=1): No Data Available
Specific Gravity: No Data Available
Solubility in Water: Soluble
Log Pow (calculated): No data available
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: 48%

Section 10

Reactivity Data

Reactivity: Not generally reactive under normal conditions.
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: Temperatures above flash point in combination with sparks, open flames, or other sources of ignition.
Incompatible Materials: Water-reactive materials, Strong oxidizing agents, Acids, Strong reducing agents, Magnesium
Hazardous Decomposition Products: Carbon oxides
Hazardous Polymerization: Will not occur

Section 11

Toxicity Data

Routes of Entry: Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): Dizziness, Depressed Activity, Central Nervous System Depression
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Isopropyl Alcohol	67-63-0	Oral LD50 Rat 5045 mg/kg Oral LD50 Mouse 3600 mg/kg		INHALATION LC50 Rat 16000 ppm
Methanol	67-56-1	Oral LD50 Mouse 7300 mg/kg		INHALATION LC50 Rat 64000 ppm
Phenolphthalein	77-09-8			

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Ethyl alcohol	64-17-5	Listed	Listed	Listed
Isopropyl Alcohol	67-63-0	Listed	Not listed	Not listed
Methanol	67-56-1	Not listed	Not listed	Not listed
Phenolphthalein	77-09-8	Listed	Listed	Listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: Evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: Evidence of negative reproductive effects.
Target Organ Effects:
Acute: Eyes
Chronic: Eyes, Liver, Gastrointestinal tract

Section 12

Ecological Data

Overview: This material is not expected to be harmful to the ecology.
Mobility: No data
Persistence: Biodegradation, Adsorbs to soil/solids
Bioaccumulation: No data

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Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Ethanol	64-17-5	96 HR LC50 PIMEPHALES PROMELAS > 100 MG/L [STATIC]
2-Propanol	67-63-0	96 HR LC50 LEPOMIS MACROCHIRUS > 1400000 µG/L
Methanol	67-56-1	96 HR LC50 PIMEPHALES PROMELAS 11130 MG/L [STATIC]
Phenolphthalein	77-09-8	48 HR EC50 DAPHNIA MAGNA 2 MG/L [STATIC] 24 HR EC50 DAPHNIA MAGNA 10800 MG/L 48 HR LC50 DAPHNIA MAGNA 9268 - 14221 MG/L 48 HR EC50 DAPHNIA MAGNA 13299 MG/L 72 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L 96 HR EC50 DESMODESMUS SUBSPICATUS > 1000 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name: UN1170 Ethanol Solutions Class 3 P.G. III	Air - IATA Proper Shipping Name: UN1170 Ethanol Solutions Class 3 P.G. III
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Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
2-Propanol		No	No	No	No	No

California Prop 65:



WARNING: Cancer and Reproductive Harm –
www.P65Warnings.ca.gov

Section 16

Additional Information

Safety Data Sheet

Revised: 08/21/2018

Replaces: 06/27/2018

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health