

# SAFETY DATA SHEET

Issue Date 13-Apr-2021 Revision Date 08-Feb-2023 Version 4.7 Page 1 / 14

## 1. IDENTIFICATION

**Product identifier** 

Product Name Phenolphthalein Indicator Solution 5 g/l

Other means of identification

Product Code(s) 16253

Safety data sheet number M00223

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent. Indicator for pH.

Uses advised against None. Restrictions on use None.

Details of the supplier of the safety data sheet

**Manufacturer Address** 

Hach Company, P.O.Box 389, Loveland, CO 80539, USA, +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

## 2. HAZARDS IDENTIFICATION

#### Classification

### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity	Category 1B
Reproductive toxicity	Category 2

#### Hazards not otherwise classified (HNOC)

Not applicable

# Label elements

## Signal word

Danger



## **Hazard statements**

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H350 - May cause cancer

H361 - Suspected of damaging fertility or the unborn child

### **Precautionary statements**

P201 - Obtain special instructions before use

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

#### Other Hazards Known

Causes mild skin irritation

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Not applicable

#### <u>Mixture</u>

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No	Percent Range	HMRIC #
Diethylene glycol monoethyl ether	111-90-0	90 - 100%	-
Phenolphthalein	77-09-8	<1%	-

# 4. FIRST AID MEASURES

## **Description of first aid measures**

General advice IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the

doctor in attendance.

**Inhalation** Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

**Skin contact** Wash skin with soap and water.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

**Symptoms** See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable Extinguishing Media Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the** No information available.

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chemical

Hazardous combustion products Carbon monoxide, Carbon dioxide.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**U.S. Notice**Only persons properly qualified to respond to an emergency involving hazardous

substances may respond to a spill according to federal regulations (OSHA 29 CFR

1910.120(a)(v)) and per your company's emergency response plan and

guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should

respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,

sawdust). Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## 7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove

contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up.

Flammability class Class IIIB

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies

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Appropriate engineering controls

**Engineering Controls** 

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Hand Protection Wear suitable gloves.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection**Wear suitable protective clothing. Wash contaminated clothing before reuse.

General Hygiene Considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and

immediately after handling the product.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow

into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Physical state

Liquid uid

AppearanceLiquidColorcolorlessOdorBlandOdor threshold1.1 ppm

Property Values Remarks • Method

Molecular weight

No data available

PH

No data available

Melting point / freezing point No data available

Initial boiling point and boiling range  $203~^{\circ}\text{C}~/~397.4~^{\circ}\text{F}$ 

Evaporation rate No data available

**Vapor pressure** 0.75 mm Hg / 0.1 kPa at 20 °C / 68 °F

Relative vapor density 4.62

Specific Gravity 0.9957

Partition coefficient Not applicable

**Soil Organic Carbon-Water Partition** 

**Decomposition temperature** 

Coefficient

Not applicable

No data available

Autoignition temperature No data available

Dynamic viscosity

No data available

Kinematic viscosity

No data available

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## Solubility(ies)

## Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature_
Soluble	> 1000 mg/L	25 °C / 77 °F

### Solubility in other solvents

Chemic	al Name_	Solubility classification_	<u>Solubility</u>	Solubility Temperature
None	eported	No information available	No data available	No information available

#### Other information

## **Metal Corrosivity**

Steel Corrosion Rate
Aluminum Corrosion Rate

No data available No data available

## **Volatile Organic Compounds (VOC) Content**

Chemical name CAS No		Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Diethylene glycol monoethyl ether	111-90-0	No data available	X
Phenolphthalein	77-09-8	No data available	-

#### **Explosive properties**

Upper explosion limit12.3%Lower explosion limit2%

# Flammable properties

Flash point 123 °C / 253.4 °F

Method OC (open cup)

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density

No data available

# 10. STABILITY AND REACTIVITY

### Reactivity

Not applicable.

### **Chemical stability**

Stable under normal conditions.

#### **Explosion data**

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

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## Possibility of hazardous reactions

None under normal processing.

### **Hazardous polymerization**

None under normal processing.

#### Conditions to avoid

None known based on information supplied.

### Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

### **Hazardous decomposition products**

None known based on information supplied.

# 11. TOXICOLOGICAL INFORMATION

## Information on likely routes of exposure

### **Product Information**

**Inhalation** No known effect based on information supplied.

**Eye contact** No known effect based on information supplied.

**Skin contact** No known effect based on information supplied.

**Ingestion** No known effect based on information supplied.

**Symptoms** No information available.

#### **Acute toxicity**

Based on available data, the classification criteria are not met

#### **Mixture**

No data available.

## **Ingredient Acute Toxicity Data**

Test data reported below.

#### **Oral Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	Rat LD <sub>50</sub>	10502 mg/kg	None reported	None reported	LOLI
Phenolphthalein (<1%) CAS#: 77-09-8	Rat LD <sub>50</sub>	> 1000 mg/kg	None reported	None reported	RTECS

#### **Dermal Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	Rabbit LD <sub>50</sub>	9143 mg/kg	None reported	None reported	LOLI

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## **Unknown Acute Toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity.

### **Acute Toxicity Estimations (ATE)**

## The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	No information available
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

### Skin corrosion/irritation

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

### Ingredient Skin Corrosion/Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	RTECS

# Serious eye damage/irritation

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

## Ingredient Eye Damage/Eye Irritation Data

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	Standard Draize Test	Rabbit	125 mg	None reported	Mild eye irritant	RTECS

# Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

### **Mixture**

No data available.

# **Ingredient Sensitization Data**

Test data reported below.

# **Skin Sensitization Exposure Route**

1	Chemical name	Test method	Species	Results	Ke	y literature references and

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				sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	None reported	Guinea pig	Not confirmed to be a skin sensitizer	Vendor SDS

### STOT - single exposure

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

## Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

# STOT - repeated exposure

Based on available data, the classification criteria are not met.

#### **Mixture**

No data available.

## Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

### Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected carcinogen.

#### **Mixture**

No data available.

# **Ingredient Carcinogenicity Data**

No data available.

Chemical name	CAS No	ACGIH	IARC	NTP	OSHA
Diethylene glycol monoethyl ether	111-90-0	-	-	-	-
Phenolphthalein	77-09-8	-	Group 2B	Reasonably Anticipated	Х

## Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 2B - Possibly Carcinogenic to
	Humans
NTP (National Toxicology Program)	Reasonably Anticipated - Reasonably
	Anticipated to be a Human Carcinogen
OSHA	X - Present

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

#### Mixture invitro Data

No data available.

### Substance invitro Data

Test data reported below.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Diethylene glycol	Mutation in	Salmonella	None reported	None reported	Negative	IUCLID

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monoethyl ether	microorganisms	typhimurium		
(90 - 100%)				
CAS#: 111-90-0				

#### Mixture invivo Data

No data available.

#### Substance invivo Data

No data available.

#### Reproductive toxicity

Classification based on data available for ingredients. Contains a known or suspected reproductive toxin. The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

#### **Mixture**

No data available.

## **Ingredient Reproductive Toxicity Data**

Test data reported below.

#### **Oral Exposure Route**

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	Mouse TD⊾₀	44000 mg/kg		Effects on Newborn Growth statistics (e.g. % reduced weight gain) Other neonatal measures or effects	HSDB

#### **Aspiration hazard**

Based on available data, the classification criteria are not met.

# 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity** 0% of the mixture consists of components(s) of unknown hazards to the aquatic

environment.

## Mixture

### **Aquatic Acute Toxicity**

No data available.

# **Aquatic Chronic Toxicity**

No data available.

# **Substance**

## **Aquatic Acute Toxicity**

Test data reported below.

#### **Fish**

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	96 hours	None reported	LC <sub>50</sub>	6010 mg/L	EPA

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#### Crustacea

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Diethylene glycol monoethyl ether (90 - 100%) CAS#: 111-90-0	48 Hours	None reported	EC50	4000 mg/L	IUCLID

## **Aquatic Chronic Toxicity**

No data available.

### Persistence and degradability

**Mixture** 

No data available.

Bioaccumulation

There is no data for this product

**Mixture** 

No data available.

Not applicable Partition coefficient

**Mobility** 

**Soil Organic Carbon-Water Partition Coefficient** 

Not applicable

#### Other adverse effects

No information available

Chemical name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disrupters - Evaluated Substances	Endocrine disrupting potential
Phenolphthalein (<1%) CAS#: 77-09-8	Group III Chemical	-	<u>-</u>

# 13. DISPOSAL CONSIDERATIONS

## Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

Incinerate material at an E.P.A. approved hazardous waste facility. Special instructions for disposal

# 14. TRANSPORT INFORMATION

Not regulated DOT

Not regulated TDG

Not regulated <u>IATA</u>

Not regulated <u>IMDG</u>

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#### **Additional information**

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

### 15. REGULATORY INFORMATION

**National Inventories** 

TSCA Complies DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

#### **International Inventories**

EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL - Existing substances	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

**AICS** - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

### **US Federal Regulations**

## **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Diethylene glycol monoethyl ether (CAS #: 111-90-0)	1.0
Phenolphthalein (CAS #: 77-09-8)	0.1

#### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### <u>CERCLA</u>

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level

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pertaining to releases of this material

## **US State Regulations**

### **California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical name	California Proposition 65
Phenolphthalein (CAS #: 77-09-8)	Carcinogen

**WARNING:** This product can expose you to chemicals including Phenolphthalein, which is known to the State of California to cause cancer.

For more information, go to <a href="http://www.P65Warnings.ca.gov">http://www.P65Warnings.ca.gov</a>

## U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Diethylene glycol monoethyl	X	-	X
ether			
111-90-0			
Phenolphthalein	X	-	-
77-09-8			

### **U.S. EPA Label Information**

Chemical name	FIFRA	FDA
Diethylene glycol monoethyl ether	180.0920	-

# 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

# **Special Comments**

None

#### **Additional information**

## Global Automotive Declarable Substance List (GADSL)

Not applicable

## **NFPA and HMIS Classifications**

NFPA	Health hazards - 0	Flammability - 1	Instability - 0	Physical and chemical properties -
HMIS	Health hazards - *	Flammability - 1	Physical hazards - 0	Personal protection - X - I

### Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR	ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS	CCRIS (Chemical Carcinogenesis Research Information System)
CDC	CDC (Center for Disease Control)
CEPA	CEPA (Canadian Environmental Protection Agency)
CICAD	CICAD (Concise International Chemical Assessment Documents)

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ECHA ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERISINERIS (The National Industrial Environment and Risks Institute)IPCS INCHEMIPCS INCHEM (International Programme on Chemical Safety)IUCLIDIUCLID (The International Uniform Chemical Information Database)NITEJapan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

### Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

MAC Maximum Allowable Concentration Ceiling Ceiling Limit Value

X Listed Vacated These values have no official status. The only

binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state

regulations.

SKN\* Skin designation SKN+ Skin sensitization
RSP+ Respiratory sensitization \*\* Hazard Designation
C Carcinogen R Reproductive toxicant

M mutagen

Prepared By Hach Product Compliance Department

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Revision Note None

#### **Disclaimer**

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE

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**OBTAINED FROM THE USE THEREOF.** 

HACH COMPANY@2022

**End of Safety Data Sheet** 

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