

Revision Date: 16.05.2018

# SAFETY DATA SHEET

# 1. Identification

Product identifier: Phenolphthalein

Other means of identification

Product No.: 2870

Recommended use and restriction on use

Recommended use: For Laboratory, Research or Manufacturing Use.

Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Avantor Performance Materials, LLC.

3477 Corporate Parkway Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

100 %

Fax: 610-573-2610

Contact Person: Environmental Health & Safety E-mail: info@avantormaterials.com

**Emergency telephone number:** 

CHEMTREC: 1-800-424-9300 within US and Canada

# 2. Hazard(s) identification

# **Hazard Classification**

#### **Health Hazards**

Germ Cell Mutagenicity

Category 2

Carcinogenicity

Category 1B

Toxic to reproduction

Category 2

## **Unknown toxicity - Health**

Acute toxicity, oral 100 %
Acute toxicity, dermal 100 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust 100 %
or mist

# **Unknown toxicity - Environment**

Acute hazards to the aquatic 0 %

environment

Chronic hazards to the aquatic

environment

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#### **Label Elements**

## **Hazard Symbol:**



Signal Word: Danger

**Hazard Statement:** Suspected of causing genetic defects.

May cause cancer.

Suspected of damaging fertility or the unborn child. May form combustible dust concentrations in air.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety

precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

# 3. Composition/information on ingredients

## **Substances**

Chemical name	Common name and synonyms	CAS number	Content in percent (%)*
Phenolphthalein		77-09-8	100%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

**Ingestion:** Rinse mouth thoroughly. Get medical attention if symptoms occur.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation

persists after washing. Wash contaminated clothing before reuse.



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**Eye contact:** Flush thoroughly with water. If irritation occurs, get medical assistance.

Most important symptoms/effects, acute and delayed

**Symptoms:** May cause irritation to skin, eyes, and respiratory tract.

Hazards: None known.

Indication of immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically.

5. Fire-fighting measures

**General Fire Hazards:** Powdered material may form explosive dust-air mixtures.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Water spray, fog, CO2, dry chemical, or regular foam.

Unsuitable extinguishing

media:

None known.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed. Dust clouds may be explosive under certain conditions. Contact with strong oxidizers may cause

fire.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

**Special protective equipment** 

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Use personal protective equipment. See Section 8 of the SDS for Personal Protective

Equipment.

Methods and material for containment and cleaning

up:

Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual

contamination.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Inform

authorities if large amounts are involved.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into

drains, water courses or onto the ground.



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# 7. Handling and storage

Precautions for safe handling: Avoid generation and spreading of dust. Ground and bond container and

> receiving equipment. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage,

including any incompatibilities: Keep containers tightly closed. Store in cool, dry place. Store in a well-

ventilated place.

# 8. Exposure controls/personal protection

## **Control Parameters**

**Occupational Exposure Limits** 

None of the components have assigned exposure limits.

Appropriate Engineering

**Controls** 

No data available.

#### Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used.

> Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an

acceptable level. Use explosion-proof ventilation equipment.

Use tight fitting goggles if dust is generated. Eye/face protection:

**Skin Protection** 

**Hand Protection:** Wear protective gloves.

Other: Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator.

Hygiene measures: Always observe good personal hygiene measures, such as washing after

handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

Provide eyewash station and safety shower.

## 9. Physical and chemical properties

# **Appearance**

Physical state: Solid Form: Powder

Color: White to pale yellow

Odor: Odorless

Odor threshold: No data available. No data available. :Ha

Melting point/freezing point: 258 °C Initial boiling point and boiling range: 657 °C

Flash Point: No data available. **Evaporation rate:** No data available.

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Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

No data available.

No data available.

Vapor pressure:

Vapor density:

No data available.

No data available.

No data available.

No data available.

**Relative density:** 1,3 (20 °C) 1,277 (32 °C)

Solubility(ies)

Solubility in water: Slightly Soluble

**Solubility (other):** ether: Approximate 0,01 g/ml

acetone: very soluble chloroform: Soluble ethanol: very soluble toluene: Soluble

Partition coefficient (n-octanol/water): No data available.

Auto-ignition temperature: 397 °C

**Decomposition temperature:**No data available. **Viscosity:**No data available.

Other information

Molecular weight: 318,31 g/mol (C20H14O4)

# 10. Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical Stability:** Material is stable under normal conditions.

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Contact with incompatible materials. Heat, sparks, flames. Avoid dust

formation.

Incompatible Materials: Strong oxidizing agents.

**Hazardous Decomposition** 

**Products:** 

Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapors.

# 11. Toxicological information

#### Information on likely routes of exposure

**Inhalation:** May cause irritation to the respiratory system.

**Skin Contact:** May cause irritation.

**Eye contact:** May cause temporary eye irritation.

**Ingestion:** May cause irritation of the gastrointestinal tract.



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## Information on toxicological effects

## Acute toxicity (list all possible routes of exposure)

Oral

**Product:** No data available.

**Dermal** 

**Product:** No data available.

Inhalation

**Product:** No data available.

Repeated dose toxicity

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** May cause skin irritation.

Serious Eye Damage/Eye Irritation

**Product:** May irritate eyes.

Respiratory or Skin Sensitization

**Product:** Not a skin sensitizer.

Carcinogenicity

**Product:** May cause cancer.

# IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Phenolphthalein Overall evaluation: 2B. Possibly carcinogenic to humans.

# **US. National Toxicology Program (NTP) Report on Carcinogens:**

Phenolphthalein Hazard Designation: Reasonably Anticipated to be a Human Carcinogen.

## **ACGIH Carcinogen List:**

No carcinogenic components identified

## **Germ Cell Mutagenicity**

In vitro

**Product:** Suspected of causing genetic defects.

In vivo

**Product:** Suspected of causing genetic defects.

Reproductive toxicity

**Product:** May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure
Product:
None known.

**Specific Target Organ Toxicity - Repeated Exposure** 

Product: None known.



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**Aspiration Hazard** 

**Product:** No data available.

Other effects: None known.

## 12. Ecological information

## **Ecotoxicity:**

Acute hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

Chronic hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

Persistence and Degradability

Biodegradation

**Product:** There are no data on the degradability of this product.

**BOD/COD Ratio** 

**Product:** No data available.

Bioaccumulative potential

**Bioconcentration Factor (BCF)** 

**Product:** No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

**Mobility in soil:** No data available.

Other adverse effects: The product components are not classified as environmentally hazardous.

However, this does not exclude the possibility that large or frequent spills

can have a harmful or damaging effect on the environment.

13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.



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# 14. Transport information

## **TDG**

Not regulated.

#### **IMDG**

Not regulated.

#### IATA

Not regulated.

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

# 15. Regulatory information

### **Canada Federal Regulations**

List of Toxic Substances (CEPA, Schedule 1)

Not Regulated

## **Export Control List (CEPA 1999, Schedule 3)**

Not Regulated

## **National Pollutant Release Inventory (NPRI)**

Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements

NPRI PT5 Not Regulated

## Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)

NPRI Not Regulated

## **Greenhouse Gases**

Not Regulated

# **Controlled Drugs and Substances Act**

CA CDSI	Not Regulated
CA CDSII	Not Regulated
CA CDSIII	Not Regulated
CA CDSIV	Not Regulated
CA CDSV	Not Regulated
CA CDSVII	Not Regulated
CA CDSVIII	Not Regulated

#### **Precursor Control Regulations**

Not Regulated

# International regulations

## Montreal protocol

Not applicable

## Stockholm convention

Not applicable

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#### Rotterdam convention

Not applicable

#### Kyoto protocol

Not applicable

## **Inventory Status:**

Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory EINECS, ELINCS or NLP: On or in compliance with the inventory Japan (ENCS) List: On or in compliance with the inventory China Inv. Existing Chemical Substances: On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory Mexico INSQ: On or in compliance with the inventory Taiwan Chemical Substance Inventory: On or in compliance with the inventory

# 16.Other information, including date of preparation or last revision

**Revision Date:** 16.05.2018

Version #: 1.2

Further Information: No data available.

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