



## Safety Data Sheet

Revision version: SDS-1.0

Revision date: 27 Jan 2021

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE OF THE COMPANY/UNDERTAKING

**Chemical Name:** Phenolphthalein Solution, 1%  
**Product Number:** RTO.G8136.010  
**Company Name:** HCS Scientific & Chemical Pte Ltd  
**Telephone Number:** (+65)6777 7077  
**Email Address:** reactivo@hcs-lab.com

### 2. HAZARDS IDENTIFICATION

#### 2.1 GHS Classification

Germ cell mutagenicity, Category 2, H341

Carcinogenicity, Category 1B, H350

Reproductive toxicity, Category 2, H361f



#### 2.2 GHS Classification

##### Signal word:

**Danger**

##### Hazard statements:

H350

May cause cancer.

H341

Suspected of causing genetic defects.

H361f

Suspected of damaging fertility.

H226

Flammable Liquid and vapour

##### Precautionary statements:

##### Prevention:

P201

Obtain special instructions before use.

P260

Do not breathe dust.

#### 2.3 Response

IF SWALLOWED: immediately call a poison center or doctor/physician.

**DO NOT** induce vomiting.

IF ON SKIN: Remove/take off immediately all contaminated clothing.

IF INHALED: Remove victim to fresh air and keep at rest in a position for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

STORAGE: Store in a well ventilated place and locked up.

DISPOSAL: Dispose of contents/container to a waste disposal plant. Restricted to professional users.



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Percent	Molecular Formula
Phenolphthalein	77-09-8	1%	C <sub>20</sub> H <sub>14</sub> O <sub>4</sub>

### 4. FIRST-AID MEASURES

#### 4.1 General advice

When symptoms persist or in all cases of doubt seek medical advice

#### 4.2 Inhalation:

After inhalation: fresh air. Call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects, both acute and delayed

Fever, Gastrointestinal disturbance, Nausea, Vomiting, cardiovascular disorders, CNS disorders

The substance has a laxative effect.

Indication of any immediate medical attention and special treatment needed

No information available.

### 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

##### ***Suitable extinguishing media***

Water, Foam, Carbon dioxide (CO<sub>2</sub>), Dry powder

##### ***Unsuitable extinguishing media***

For this substance/mixture no limitations of extinguishing agents are given.

#### 5.2 Special hazards arising from the substance or mixture

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Vapours are heavier than air and may spread along floors.

#### 5.3 Advice for firefighters

##### ***Special protective equipment for firefighters***

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.



*Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

Indications about waste treatment see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### ***Advice on safe handling***

Work under hood. Do not inhale

substance/mixture. Observe label precautions.

#### ***Hygiene measures***

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.



## 7.2 Conditions for safe storage, including any incompatibilities

### **Storage conditions**

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

### 8.2 Exposure controls

#### **Engineering measures**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

#### **Individual protection measures**

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

#### **Eye/face protection**

Safety glasses

#### **Hand protection**

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC Directive



89/686/EEC and the related standard EN374, for example KCL 741 Dermatrill® L (full contact), KCL 741 Dermatrill® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet (>, <)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

### **Other protective equipment**

protective clothing

### **Respiratory protection**

required when dusts are generated.

Recommended Filter type: Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic and very toxic substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not let product enter drains.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

a) Appearance	Form: Liquid Color: Colourless
b) Odor	odorless
c) Odor Threshold	No information available
d) pH	No information available
e) Melting point/freezing point	No information available
f) Initial boiling point and boiling range	No information available
g) Flash point	Not applicable
h) Evaporation rate	No data available



- |    |  |                               |
|----|--|-------------------------------|
| i) | Flammability (solid, gas)                    | The product is not flammable. |
| j) | Upper/lower flammability or explosive limits | No data available             |



- |                     |                          |
|---------------------|--------------------------|
| k) Vapor pressure   | No data available        |
| l) Vapor density    | No data available        |
| m) Relative density | No information available |
| n) Water solubility | No information available |

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong  
oxidizing agents

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

no information available

### 10.6 Hazardous decomposition products

no information available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### ***Acute oral toxicity***

This information is not available.

#### ***Acute inhalation toxicity***

This information is not available.

#### ***Acute dermal toxicity***

This information is not available.

#### ***Skin irritation***

In vitro study

Result: non-corrosive OECD

Test Guideline 431



### **Eye irritation**

Result: non-corrosive OECD

Test Guideline 437

*Sensitisation* Sensitisation test:

MouseResult: negative

Method: OECD Test Guideline 429

*Genotoxicity in vivo*

Mutagenicity (mammal cell test): micronucleus.

Mousemale

Bone marrow Result:

positive

(Lit.)

### **Genotoxicity in vitro**

Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

Mutagenicity (mammal cell test): chromosome aberration.

Result: positive

(Lit.)

sister chromatid exchange assay

Chinese hamster ovary cells Result:

negative

(National Toxicology Program)

### **Carcinogenicity**

This information is not available.

### **Reproductive toxicity**

This information is not available.

### **Teratogenicity**

This information is not available.





## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

*Toxicity to daphnia and other aquatic invertebrates* EC50 Daphnia

magna (Water flea): > 4,34 mg/l; 48 h OECD Test Guideline 202

(above the solubility limit in the test medium)

#### ***Toxicity to algae***

Growth inhibition EbC50 Desmodesmus subspicatus (green algae): 2,5 mg/l; 72 h OECD Test Guideline 201

Growth inhibition ErC50 Desmodesmus subspicatus (green algae): > 3,33 mg/l; 72 h OECD Test Guideline 201

### 12.2 Persistence and degradability

#### ***Biodegradability***

76 %; 28 d; aerobic

OECD Test Guideline 301F

The 10 day time window criterion is not fulfilled.

Readily biodegradable

### 12.3 Bioaccumulative potential

#### ***Partition coefficient: n-octanol/water***

log Pow: 0,9

OECD Test Guideline 107

Bioaccumulation is not expected.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### 12.6 Other adverse effects

#### ***Surface tension***

71,8 mN/m

at 20 °C

Method: OECD Test Guideline 115

#### ***Additional ecological information***

Discharge into the environment must be avoided.



## 13. DISPOSAL CONSIDERATIONS

### 13.1 Disposal considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. TRANSPORT INFORMATION

### 14.1 Domestic (Land D.O.T.)

**Shipping name:** Phenolphthalein  
**Class:** NA  
**Packing group:** NA  
**UN/NA:** NA

### 14.2 International (Sea I.M.O.)

**Shipping name:** Phenolphthalein  
**Class:** NA  
**Packing group:** NA  
**UN/NA:** NA

### 14.2 International (Air I.C.A.O.)

**Shipping name:** Phenolphthalein  
**Class:** NA  
**Packing group:** NA  
**UN/NA:** NA

## 15. REGULATORY INFORMATION

### 15.1 Chemical Inventory status

<b>Ingredient</b>	<b>TSCA</b>	<b>EC</b>	<b>Japan</b>	<b>Australia</b>
Phenolphthalein	No	No	No	No

### 15.2 Chemical weapons convention

<b>TSCA(12b)</b>	<b>CDTA</b>
No	No

### 15.3 SARA311/312

<b>Acute</b>	<b>Chronic</b>	<b>Fire</b>	<b>Pressure</b>
No	No	No	No

### 15.4 Reactive

No

### 15.5 Poison schedule

None allocated



## 15.6 WHMIS

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

## 16. OTHER INFORMATION

**16.1 Reason for revision:** General update  
**Schedule:** 27/01/2021

### 16.2 Disclaimer

The information contained in this Safety Data Sheet is intended to assist in the use of the above product without risk to safety or health and is based on current knowledge and experience. This information relates only to the specific material designed and may not be valid for such material used in combination with any other materials or in any process. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

### 16.2 Further information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

