

## Safety Data Sheet

Revision version: SDS-1.0 Revision date: 27 Jan 2021

## 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

## **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.















## COMPOSITION/INFORMATION ON INGREDIENTS

Percent Molecular Formula Ingredient CAS No. Phenolphthalein 77-09-8 C20H14O4 1%

#### 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.

#### FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

## Suitable extinguishing media

Water, Foam, Carbon dioxide (CO2), 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.

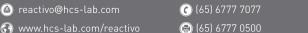
Vapours are heavier than air and may spread along floors.

## 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.

## 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 dangerarea, 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.

## **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.

## **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 Dermatril® L (full contact), KCL 741 Dermatril® 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 underconditions 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).

#### 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 toxicand very toxic substances

The entrepeneur 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.

## PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance Form: Liquid Color: Colourless

b) Odor odorless

c) Odor Threshold No information available No information available d) рΗ e) Melting No information available

point/freezing point

No information available

Initial boiling point f) and boiling range

Flash point Not applicable Evaporation rate No data available











R

i) Flammability (solid, gas)

The product is not flammable.

j) Upper/lower flammability or explosive limits

No data available



No data available k) Vapor pressure I) 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 beassumed.

#### 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

## **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







🚱 www.hcs-lab.com/reactivo











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.

Mouse male

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.

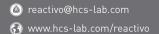
## Reproductive toxicity

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 hOECD 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 hOECD 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: Packing group: NA UN/NA: NA

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

Phenolphthalein Shipping name:

Class: NA NA Packing group: UN/NA: NA

## 15. REGULATORY INFORMATION

15.1 Chemical Inventory status

Ingredient **TSCA** EC Japan **Australia** Phenolphthalein No No No Nο

15.2 Chemical weapons convention

TSCA(12b) **CDTA** No No

15.3 SARA311/312

Acute Chronic **Fire Pressure** No No No No

15.4 Reactive

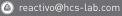
No

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.





