

Revised on: 29.06.2020

Phenolphthalein (C.I. 764) pure

Created on: 29.06.2020

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name:** Phenolphthalein (C.I. 764) pure

**Article number:** LC-4456

**CAS-number:** 77-09-8

**Registration number:** 01-2119498295-24-XXXX

### 1.2. Relevant identified uses of the substance or mixture

- **Identified uses:** Reagent for analysis

### 1.3. Details of the supplier of the safety data sheet

**Manufacturer/Supplier:**

neoFroxx GmbH

Marie-Curie-Str. 3

D-64683 Einhausen

[info@neofroxx.com](mailto:info@neofroxx.com)

**Further information obtainable from:**

Dep. Quality Control

### 1.4. Emergency telephone number

+49 (6251) 989 24 - 0 (during normal business hours)

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008):**

Germ cell mutagenicity, Category 2, H341

Carcinogenicity, Category 1B, H350

Reproductive toxicity, Category 2, H361f

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2. Label elements

**Labelling according to Regulation (EC) No 1272/2008:**

**Hazard pictograms:**



**Signal word:**

Danger

**Hazard statements:**

H350 May cause cancer.

H341 Suspected of causing genetic defects.

H361f Suspected of damaging fertility.

**Precautionary statements:**

Prevention

P201 Obtain special instructions before use.

P260 Do not breathe dust.

Response

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

**Index-No.:** 604-076-00-1

- 2.3. Other hazards  
None known.

### 3. Composition / information on ingredients

- 3.1. Chemical characterisation:

- 3.2. Substance

**Formula:** C<sub>20</sub>H<sub>14</sub>O<sub>4</sub> (Hill)

**Index-No.:** 604-076-00-1

**EC-No.:** 201-004-7

**Molar mass:** 318,32 g/mol

**Hazardous components (REGULATION (EC) No 1272/2008)**

**Chemical name (Concentration):**

phenolphthalein (<= 100 % )

**CAS-No.:**

77-09-8

**Registration number:**

01-2119498295-24-XXXX

**Classification:**

Germ cell mutagenicity, Category 2, H341

Carcinogenicity, Category 1B, H350

Reproductive toxicity, Category 2, H361f

For the full text of the H-Statements mentioned in this Section, see Section 16.

- 3.3. Mixture  
Not applicable

### 4. First aid measures

- 4.1. Description of first aid measures

**After inhalation:** fresh air. Call in physician.

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

**After eye contact:** rinse out with plenty of water. Remove contact lenses.

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

- 4.2. Most important symptoms and effects, both acute and delayed

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

The substance has a laxative effect.

- 4.3. Indication of any immediate medical attention and special treatment needed  
No further relevant 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:**

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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:** 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 material for containment and cleaning up:

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. 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.

**Recommended storage temperature:** see product label.

### 7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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## 8. Exposure controls / personal protection

Additional information about design of technical facilities: No further data; see item 7.

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 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.

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## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Form:** solid

**Colour:** white

**Odour:** odourless

**Odour Threshold:** No information available.

**pH:** No information available.

**Melting point:** 263,7 °C

Method: OECD Test Guideline 102

**Boiling point/boiling range:** > 450 °C

Method: OECD Test Guideline 103

**Flash point:** Not applicable

**Evaporation rate:** No information available.

**Flammability (solid, gas):** The product is not flammable. Flammability (solids).

**Lower explosion limit:** No information available.

**Upper explosion limit:** No information available.

**Vapour pressure:** < 0,00001 Pa at 50 °C

Method: OECD Test Guideline 104

**Relative vapour density:** No information available.

**Density:** 1,296 g/cm<sup>3</sup> at 20 °C

Method: OECD Test Guideline 109

**Relative density:** No information available.

**Water solubility:** 3,36 mg/l at 20 °C

Method: OECD Test Guideline 105

**Partition coefficient: n-octanol/water:** log Pow: 0,9

OECD Test Guideline 107

Bioaccumulation is not expected.

**Auto-ignition temperature:** 397 °C

Method: Tested according to Annex V of Directive 67/548/EEC.

**Decomposition temperature:** No information available.

**Viscosity, dynamic:** No information available.

**Explosive properties:** Not classified as explosive.

**Oxidizing properties:** none

### 9.2. Other information

**Bulk density:** 350 - 450 kg/m<sup>3</sup>

## 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

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10.4. Conditions to avoid  
no information available

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10.5. Incompatible materials:  
no information available

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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: Mouse

Result: negative

Method: OECD Test Guideline 429

**Germ cell mutagenicity:**

**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

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(National Toxicology Program)

**Carcinogenicity:**

This information is not available.

**Reproductive toxicity:**

This information is not available.

**Teratogenicity:**

This information is not available.

**CMR effects:**

Carcinogenicity:

May cause cancer.

Mutagenicity:

Suspected of causing genetic defects.

Reproductive toxicity:

Suspected of damaging fertility.

**Specific target organ toxicity - single exposure:**

This information is not available.

**Specific target organ toxicity - repeated exposure:**

This information is not available.

**Aspiration hazard:**

This information is not available.

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11.2. Further information

**After uptake of large quantities:**

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

The substance has a laxative effect.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

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## 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

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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

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### 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. Waste treatment methods

**Recommendation:**

Chemicals must be disposed of in compliance with the respective national regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system

**Uncleaned packaging:**

**Recommendation:**

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14. Transport information

### Land transport (ADR/RID)

**14.1 - 14.6**

Not classified as dangerous in the meaning of transport regulations.

### Inland waterway transport (ADN)

Not relevant

### Air transport (IATA)

**14.1 - 14.6**

Not classified as dangerous in the meaning of transport regulations.

### Sea transport (IMDG)

**14.1 - 14.6**

Not classified as dangerous in the meaning of transport regulations.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant



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## 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### EU regulations:

#### Major Accident Hazard Legislation:

SEVESO III

Not applicable

#### Occupational restrictions:

Take note of Dir 94/33/EC on the protection of young people at work. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

#### Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

not regulated

#### Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC:

not regulated

#### Substances of very high concern (SVHC):

This product does contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 59 above the respective regulatory concentration limit of > 0.1 % (w/w).

**Contains:** phenolphthalein

#### National legislation:

**Storage class:** 6.1C

15.2. Chemical safety assessment:

For this product a chemical safety assessment was not carried out.

## 16. Other information

### Full text of H-Statements referred to under sections 2 and 3.:

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361f Suspected of damaging fertility.

### Training advice:

Provide adequate information, instruction and training for operators.

### Labelling:

#### Signal word:

Danger

#### Hazard statements:

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

#### Precautionary statements:

Prevention

P201 Obtain special instructions before use.

P260 Do not breathe dust.

Response

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

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**Further information:**

Restricted to professional users.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative