

# Phenolphthalein



## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name**

Phenolphthalein

**CAS number**

77-09-8

**EC number**

201-004-7

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses**

Research and development.

**Not suitable for use in**

Not suitable for human consumption or veterinary purposes.

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

**Supplier**

Molekula Group

Street address

Molekula Ltd, Lingfield Way, Darlington,  
DL1 4XX Darlington  
United Kingdom

Telephone

+44 (0) 3302 000 333

Email

info@molekula.com

Web site

www.molekula.com

**Contact person**

Kevin Banks

**Email address**

+44 (0) 7769276927

### 1.4. Emergency telephone number

**Poison center/Additional emergency number**

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

#### Classification

Carcinogenicity, hazard category 1B  
Germ cell mutagenicity, hazard category 2  
Reproductive toxicity, hazard category 2  
Skin irritation, hazard category 2

#### Hazard statements

H315, H341, H350, H361f

### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H315 Causes skin irritation.  
H341 Suspected of causing genetic defects.  
H350 May cause cancer.  
H361f Suspected of damaging fertility

#### Precautionary statements

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P263 Avoid contact during pregnancy and while nursing.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.

### 2.3. Other hazards

No data available

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## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
phenolphthalein	77-09-8 201-004-7 01-2119498295-24 604-076-00-1	100%	Muta. 2, Carc. 1B, Repr. 2	H341, H350, H361f - -	Carc. 1B; H350: C ≥ 1 %;

#### Molecular weight

318.32

#### Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel.

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

#### Skin contact

IF ON SKIN: Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention. Get medical advice/attention if you feel unwell.

#### Eye contact

Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.

#### Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

#### Information for doctors

First aiders/ medical personnel need to protect themselves.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### Inhalation

Single exposure may cause the following adverse effects: Upper respiratory irritation. Difficulty in breathing.

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## **Skin contact**

Single exposure may cause the following adverse effects: Severe skin irritation.

## **Eye contact**

Single exposure may cause the following adverse effects: Severe irritation.

## **Ingestion**

Single exposure may cause the following adverse effects: Severe abdominal pain. Nausea, vomiting.

### **4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. No special treatment requirement.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

#### **Unsuitable extinguishing media**

No specific fire fighting procedure given.

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

Specific hazards: None.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

Not combustible.

Ambient fire may liberate hazardous vapours.

### **5.3. Advice for firefighters**

#### **Special protective equipment for fire-fighters**

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

## **SECTION 6: Accidental release measures**

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

Avoid dust formation. Avoid inhalation of dust and contact with skin and eyes. Provide adequate ventilation. For personal protection, see section 8.

### **6.2. Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

### **6.3. Methods and material for containment and cleaning up**

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

### **6.4. Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Preventive handling precautions

Work under hood Do not inhale substance/mixture

#### General hygiene

Immediately change contaminated clothes. Wash skin thoroughly after handling. For precautions see section 2.2.

### 7.2. Conditions for safe storage, including any incompatibilities

Store at ambient temperature. Store in a dry place. Store in a closed container.

### 7.3. Specific end use(s)

No specific usage precautions noted.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No data available

### 8.2. Exposure controls

#### Eye / face protection

Wear eye protection.

#### Hand protection

Wear protective gloves. Recommended gloves: Nitrile.

Glove Thickness: 0.11mm

Breakthrough time: 8 hours

Always inspect gloves before use. If signs of wear and tear are noticed then the gloves should be replaced.

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash contaminated skin thoroughly after handling.

#### Other skin protection

Wash skin thoroughly after handling.

#### Respiratory protection

Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

#### Environmental exposure controls

Avoid discharge into drains.

## SECTION 9: Physical and chemical properties

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

#### Physical state

Solid

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**Colour**

White.

**Odour**

Odourless.

**Melting point / freezing point**

261 - 263 °C - lit.

**Boiling point or initial boiling point and boiling range**

> 450 °C at 1,013 hPa

**Flammability**

No data available

**Lower and upper explosion limit**

No data available

**Flash point**

No data available

**Auto-ignition temperature**

397 °C

**Decomposition temperature**

No data available

**pH**

No data available

**Kinematic viscosity**

No data available

**Solubility**

0.00336 g/l at 20 °C

**Partition coefficient n-octanol/water**

log Pow: 0.9 at 25 °C

**Vapour pressure**

< 0.1 hPa at 50 °C

**Density and/or relative density**

ca.1.29 at 20.6 °C

**Relative vapour density**

No data available

**Particle characteristics**

No data available

**9.2. Other information**

No data available

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidising agents.

### 10.4. Conditions to avoid

No data available

### 10.5. Incompatible materials

Strong oxidising agents.

### 10.6. Hazardous decomposition products

See section 5.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Skin corrosion/irritation

Product / Substance name CAS / EC no.	Result	Duration of exposure	Species
phenolphthalein 77-09-8 / 201-004-7	Irritating.	42 minutes	reconstructed human epidermis (RhE)

#### Serious eye damage/irritation

Product / Substance name CAS / EC no.	Result	Duration of exposure	Method / Guideline
phenolphthalein 77-09-8 / 201-004-7	non-corrosive	4 hours	In vitro study

#### Respiratory or skin sensitisation

Product / Substance name CAS / EC no.	Result	Species	Method / Guideline
phenolphthalein 77-09-8 / 201-004-7	Not a skin sensitiser.	Mouse	Local Lymph Node Assay

#### Germ cell mutagenicity

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Product / Substance name CAS / EC no.	Result	Metabolic activation / Exposure	Species	Method / Guideline
phenolphthalein 77-09-8 / 201-004-7	Negative.	with and without meta- bolic activation	Salmonella typhimurium	Ames test

### Carcinogenicity

Product / Substance name CAS / EC no.	Other
phenolphthalein 77-09-8 / 201-004-7	Potentially carcinogenic to humans.

### Reproductive toxicity

Product / Substance name CAS / EC no.	Result
phenolphthalein 77-09-8 / 201-004-7	Suspected of damaging fertility.

### Aspiration hazard

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

### 11.2. Information on other hazards

No data available

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute algae toxicity

Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
phenolphthalein 77-09-8 / 201-004-7	NOEC	0.57mg/l	72 hours	Desmodesmus sub- spicatus (green algae)
phenolphthalein 77-09-8 / 201-004-7	ErC50	>3.33mg/l	72 hours	Desmodesmus sub- spicatus (green algae)

#### Acute crustacean toxicity

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Product / Substance name CAS / EC no.	Measurement type	Value / Result	Duration of exposure	Species
phenolphthalein 77-09-8 / 201-004-7	EC50	>100mg/l	48 hours	Daphnia magna

## 12.2. Persistence and degradability

### Persistence and degradability

Product / Substance name CAS / EC no.	Type of test	Duration	Result	Degradation
phenolphthalein 77-09-8 / 201-004-7	aerobic	28 days	76%	The substance is readily biodegradable.

## 12.3. Bioaccumulative potential

No data available

## 12.4. Mobility in soil

No data available

## 12.5. Results of PBT and vPvB assessment

No data available

## 12.6. Endocrine disrupting properties

No data available

## 12.7. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal considerations

Dispose of contents/container in accordance with local/regional/national/international regulations.

## SECTION 14: Transport information

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

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## 14.4. Packing group

Not applicable

## 14.5. Environmental hazards

Not applicable

## 14.6. Special precautions for user

Not applicable

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU regulations

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### National regulations

No data available

### 15.2. Chemical safety assessment

No data available

## SECTION 16: Other information

#### Phrase meaning

Carc. 1B - Carcinogenicity, hazard category 1B

Muta. 2 - Germ cell mutagenicity, hazard category 2

Repr. 2 - Reproductive toxicity, hazard category 2

Skin Irrit. 2 - Skin irritation, hazard category 2

H315 Causes skin irritation.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H361f Suspected of damaging fertility