

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

**o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 1 of 9

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

o-Phosphoric acid 0.1 mol/l - 0.3 N solution

UFI: HYX9-X1K3-X00A-JT6H

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

**Uses advised against**

Do not use for private purposes (household).

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

Company name:	AnalytiChem GmbH	
	ACD	
Street:	Stempelstraße 6	
Place:	D-47167 Duisburg	
Telephone:	0203/5194-0	Telefax: 0203/5194-290
E-mail:	info@analytichem.de	
Contact person:	Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
E-mail:	produktsicherheit@analytichem.de	
Internet:	www.analytichem.de	
Responsible Department:	Abteilung Produktsicherheit	

**1.4. Emergency telephone number:**

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

**Further Information**

This product is a mixture. REACH Registration Number see section 3.

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Met. Corr. 1; H290

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008**

Signal word: Warning

Pictograms:

**Hazard statements**

H290 May be corrosive to metals.

**Precautionary statements**

P234 Keep only in original packaging.  
P390 Absorb spillage to prevent material damage.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 2 of 9

P406

Store in a corrosion-resistant container with a resistant inner liner.

#### **2.3. Other hazards**

No data available

### **SECTION 3: Composition/information on ingredients**

#### **3.2. Mixtures**

##### **Chemical characterization**

Mixtures in aqueous solution

##### **Relevant ingredients**

none (according to Regulation (EC) No 1907/2006 (REACH))

##### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### **SECTION 4: First aid measures**

#### **4.1. Description of first aid measures**

##### **General information**

No data available

##### **After inhalation**

Provide fresh air.

Call a doctor if you feel unwell.

##### **After contact with skin**

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

In case of skin irritation, consult a physician.

##### **After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

##### **After ingestion**

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting. Do not allow a neutralisation agent to be drunk.

Call a physician immediately.

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

Irritant

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

No data available

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

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

Co-ordinate fire-fighting measures to the fire surroundings.

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

no restriction

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

Non-combustible liquids

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 3 of 9

Hazardous combustion products

In case of fire may be liberated:

Phosphorus oxides

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

In case of fire: Wear self-contained breathing apparatus.

#### **Additional information**

Use water spray jet to protect personnel and to cool endangered containers.

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

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

##### **General advice**

Corrosive to metals.

##### **For non-emergency personnel**

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Do not breathe dust/fume/gas/mist/vapours/spray.

##### **For emergency responders**

Precautionary statements For emergency responders : Personal protection equipment: see section 8

#### **6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

##### **For cleaning up**

Clean contaminated articles and floor according to the environmental legislation.

##### **Other information**

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

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

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

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

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

##### **Advice on protection against fire and explosion**

Usual measures for fire prevention.

##### **Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take

a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe

vapour/aerosol.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 4 of 9

#### **Further information on handling**

- Draw up and observe skin protection programme.
- Wash hands and face before breaks and after work and take a shower if necessary.
- Take off immediately all contaminated clothing and wash it before reuse.

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

##### **Requirements for storage rooms and vessels**

- Corrosive to metals.
- Unsuitable container/equipment material: Metal, Light metal

##### **Further information on storage conditions**

- Keep container tightly closed.
- storage temperature: +15°C - +25 °C

#### **7.3. Specific end use(s)**

- Laboratory chemicals

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

- Technical measures and the application of suitable work processes have priority over personal protection equipment.
- If handled uncovered, arrangements with local exhaust ventilation have to be used.

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

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

- goggles
- Wear eye/face protection.

##### **Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

##### **By long-term hand contact**

- Trade name/designation: KCL 741 Dermatril® L
- Recommended material: NBR (Nitrile rubber) 0,11 mm
- Wearing time with permanent contact: > 480 min

##### **By short-term hand contact**

- Trade name/designation: KCL 741 Dermatril® L
- Recommended material: NBR (Nitrile rubber) 0,11 mm
- Wearing time with occasional contact (splashes): > 480 min

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)).

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 5 of 9

**Skin protection**

Wear suitable protective clothing. Take off immediately all contaminated clothing.  
Wash hands before breaks and after work.

**Respiratory protection**

Respiratory protection necessary at: aerosol or mist formation

**Environmental exposure controls**

Do not allow to enter into surface water or drains.

**SECTION 9: Physical and chemical properties**

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

Physical state:	Liquid	
Colour:	colourless	
Odour:	odourless	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		No data available
Lower explosion limits:		No data available
Upper explosion limits:		No data available
Flash point:		X
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value:		1,6
Viscosity / kinematic:		No data available
Water solubility:		completely miscible
Solubility in other solvents		No data available
Partition coefficient n-octanol/water:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density (at 20 °C):		1,00378 g/cm <sup>3</sup>
Bulk density:		No data available
Relative vapour density:		No data available

**9.2. Other information**

**Information with regard to physical hazard classes**

**Explosive properties**

The product develops hydrogen in an aqueous solution in contact with metals.

Sustaining combustion: No data available

**Self-ignition temperature**

Solid: No data available

Gas: No data available

**Oxidizing properties**

Oxidizing

**Other safety characteristics**

Evaporation rate: No data available

Solvent separation test: No data available

Solvent content: No data available

Solid content: No data available

Sublimation point: No data available

Softening point: No data available

Pour point: No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 6 of 9

No data available:

Viscosity / dynamic:

No data available

Flow time:

No data available

#### **Further Information**

Corrosive to metals.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Corrosive to metals.

### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

### **10.3. Possibility of hazardous reactions**

Alkali (lye)

metals

The product develops hydrogen in an aqueous solution in contact with metals.

### **10.4. Conditions to avoid**

No data available

### **10.5. Incompatible materials**

Metal, Aluminium, iron and steel

The product develops hydrogen in an aqueous solution in contact with metals.

### **10.6. Hazardous decomposition products**

In case of fire may be liberated:

SECTION 5: Firefighting measures

#### **Further information**

No data available

## **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

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

#### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

#### **Irritation and corrosivity**

Based on available data, the classification criteria are not met.  
slightly irritant but not relevant for classification.

#### **Sensitising effects**

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

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

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

#### **STOT-single exposure**

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

#### **STOT-repeated exposure**

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

#### **Aspiration hazard**

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

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 7 of 9

#### **Specific effects in experiment on an animal**

There are no data available on the preparation/mixture itself.

#### **Additional information on tests**

There are no data available on the preparation/mixture itself.

#### **Practical experience**

There are no data available on the preparation/mixture itself.

#### **11.2. Information on other hazards**

##### **Other information**

There are no data available on the preparation/mixture itself.

##### **Further information**

There are no data available on the preparation/mixture itself.

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

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

#### **12.2. Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

#### **12.3. Bioaccumulative potential**

There are no data available on the mixture itself.

#### **12.4. Mobility in soil**

There are no data available on the mixture itself.

#### **12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### **12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

##### **Further information**

Do not allow to enter into surface water or drains.

Discharge into the environment must be avoided.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

##### **Contaminated packaging**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### **SECTION 14: Transport information**

#### **Land transport (ADR/RID)**

<b><u>14.1. UN number or ID number:</u></b>	UN 1805
<b><u>14.2. UN proper shipping name:</u></b>	PHOSPHORIC ACID, SOLUTION
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C1
Limited quantity:	5 L
Excepted quantity:	E1

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 8 of 9

Transport category: 3  
Hazard No: 80  
Tunnel restriction code: E

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 1805  
**14.2. UN proper shipping name:** PHOSPHORIC ACID, SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8  
Classification code: C1  
Limited quantity: 5 L  
Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1805  
**14.2. UN proper shipping name:** PHOSPHORIC ACID SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8  
Special Provisions: 223  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-A, S-B

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1805  
**14.2. UN proper shipping name:** PHOSPHORIC ACID SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8  
Special Provisions: A3 A803  
Limited quantity Passenger: 1 L  
Passenger LQ: Y841  
Excepted quantity: E1  
IATA-packing instructions - Passenger: 852  
IATA-max. quantity - Passenger: 5 L  
IATA-packing instructions - Cargo: 856  
IATA-max. quantity - Cargo: 60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**SECTION 15: Regulatory information**

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

**EU regulatory information**

Information according to Directive 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water hazard class (D): - - non-hazardous to water

**SECTION 16: Other information**

**Changes**

This data sheet contains changes from the previous version in section(s): 1,12.



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**o-Phosphoric acid 0.1 mol/l - 0.3 N solution**

Revision date: 09.02.2024

Product code: 14792

Page 9 of 9

**Abbreviations and acronyms**

Met. Corr: Substance or mixture corrosive to metals

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data

**Relevant H and EUH statements (number and full text)**

H290                      May be corrosive to metals.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*