



Phosphomolybdic acid, cryst.

Revision date: 18.05.2017

Product code: 3D-098

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

1.1. Product identifier

Phosphomolybdic acid, cryst.

CAS No: 51429-74-4

EC No: 234-713-5

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

Use of the substance/mixture

Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Company name: Waldeck GmbH & Co KG

Division Chroma

Street: Havixbecker Str. 62

Place: D-48161 Münster

Post-office box: 410180

D-48065 Münster

Telephone: +49(0)180/2247662

Telefax: +49(0)180/1247662

Responsible Department: Labor

Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr

1.4. Emergency telephone

number:

+49(0)180/2247662

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Oxidising liquid: Ox. Liq. 2

Skin corrosion/irritation: Skin Corr. 1B

Hazard Statements:

May intensify fire; oxidiser.

Causes severe skin burns and eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Phosphomolybdic Acid crist.

Signal word: Danger

Pictograms:



Hazard statements

H272 May intensify fire; oxidiser.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P220 Keep/Store away from combustible materials.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with



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P304+P340 water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Sum formula: $\text{H}_3\text{Mo}_{12}\text{O}_{40}\text{P} \cdot x \text{H}_2\text{O}$
Molecular weight: 1825,28 g/mol

Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|---|----------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 51429-74-4 | Phosphormolybdic Acid crist. | | | 100 % |
| | 234-713-5 | | | |
| | Ox. Liq. 2, Skin Corr. 1B; H272 H314 | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

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.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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



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alcohol resistant foam, Dry extinguishing powder, Carbon dioxide

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Hazardous combustion products (Phosphorus oxides).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid generation of dust.
Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on storage compatibility

No special measures are necessary.

Further information on storage conditions

storage temperature: at room temperature

7.3. Specific end use(s)

Use as laboratory reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls





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Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Protective and hygiene measures

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.

Eye/face protection

Suitable eye protection: goggles.

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.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------|-------------|
| Physical state: | crystalline |
| Colour: | yellow |
| Odour: | odourless |

| | |
|-----------|--------|
| pH-Value: | acidic |
|-----------|--------|

Changes in the physical state

| | |
|--|----------------|
| Melting point: | 78 - 90 °C |
| Initial boiling point and boiling range: | not determined |
| Flash point: | not applicable |

Flammability

| | |
|-------------------------|----------------|
| Solid: | not determined |
| Gas: | not applicable |
| Lower explosion limits: | not determined |
| Upper explosion limits: | not determined |

Auto-ignition temperature

| | |
|----------------------------|----------------|
| Solid: | not determined |
| Gas: | not applicable |
| Decomposition temperature: | not determined |

Oxidizing properties

Not oxidizing.

| | |
|---------------------------------|----------------|
| Vapour pressure: | not determined |
| Density (at 20 °C): | 1,62 g/cm³ |
| Water solubility: (at 20 °C) | easily soluble |

Solubility in other solvents

not determined



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| | |
|------------------------|----------------|
| Partition coefficient: | not determined |
| Vapour density: | not determined |
| Evaporation rate: | not determined |

9.2. Other information

| | |
|----------------|----------------|
| Solid content: | not determined |
|----------------|----------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Additional information on tests

Classification according to Regulation (EC) No. 1272/2008 [CLP]: dangerous health properties

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste



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according to applicable legislation.

Contaminated packaging



Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information



Land transport (ADR/RID)

14.1. UN number: UN 3084
14.2. UN proper shipping name: CORROSIVE SOLID, OXIDIZING, N.O.S. (Molybdatophosphorsäure)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8+5.1

Classification code: CO2
Special Provisions: 274
Limited quantity: 1 kg
Excepted quantity: E2
Transport category: 2
Hazard No: 85
Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 3084
14.2. UN proper shipping name: CORROSIVE SOLID, OXIDIZING, N.O.S. (Molybdatophosphorsäure)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8+5.1

Classification code: CO2
Special Provisions: 274
Limited quantity: 1 kg
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 3084
14.2. UN proper shipping name: CORROSIVE SOLID, OXIDIZING, N.O.S. (Molybdatophosphoric acid)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8+5.1

Special Provisions: 274
Limited quantity: 1 kg
Excepted quantity: E2
EmS: F-A, S-Q



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Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3084
14.2. UN proper shipping name: CORROSIVE SOLID, OXIDIZING, N.O.S. (Molybdato-phosphoric acid)
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8+5.1



Limited quantity Passenger: 5 kg
Passenger LQ: Y844
Excepted quantity: E2
IATA-packing instructions - Passenger: 859
IATA-max. quantity - Passenger: 15 kg
IATA-packing instructions - Cargo: 863
IATA-max. quantity - Cargo: 50 kg

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 3 - highly water contaminating

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

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 Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%



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LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

| | |
|------|--|
| H272 | May intensify fire; oxidiser. |
| H314 | Causes severe skin burns and eye damage. |

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.