
MATERIAL SAFETY DATA SHEET

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

Product name: PHOSPHOMOLYBDIC ACID 1%
Brand: Solmedia Ltd

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

PC 21 Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification under CLP: Regulation (EC) No. 1272/2008 [CLP]

| Hazard Class | Hazard Category | Hazard Statement |
|-------------------------------|-----------------|------------------|
| Oxidizing liquid | Category 3 | H272 |
| Skin corrosion/irritation | Category 1A | H314 |
| Serious eye damage/irritation | Category 1 | H318 |

2.2 Label elements**Hazard statements:**

- H272 – May intensify fire; oxidizer
- H314 – Causes severe skin burns and eye damage.
- H318 – Causes serious eye damage.

Precautionary statements:

- P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P220 - Keep/Store away from clothing/combustible materials.
 P221 - Take any precaution to avoid mixing with combustibles.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P370+P378 - In case of fire: Use appropriate media (water spray, dry powder, foam, carbon dioxide) for extinction.
 P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
 P264 - Wash ... thoroughly after handling.
 P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P303+P361+P353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P363 - Wash contaminated clothing before reuse.
 P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P310 - Immediately call a POISON CENTER/doctor.
 P321 - Specific treatment (see ... on this label).
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P405 - Store locked up.

2.3 Other hazards

PBT: Results of PBT and vPvB – not applicable

SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Hazardous ingredients Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | | Classification (Regulation (EC) No 1272/2008 [CLP]) | | |
|----------------------|---------------------------------------|---|---|----------------------|
| Hazardous Components | | Amount [%] | Hazard class/ Hazard category | Hazard Statements |
| Name: | Phosphomolybdic acid dodecahydrate | 1% | OXI. LIQ. CAT. 3. SKIN CORR/IRRI. CAT. 1A. EYE DAM. CAT. 1. | H272 H314 H318 |
| CAS NO. | 51429-74-4 | | | |
| EC-NO. | 234-713-5 | | | |
| FORMULA | H3Mo12O40P. XH2O | | | |
| MOL. WEIGHT | 1825.25 g/mol | | | |

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

After inhalation Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

After eye contact In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and IF irritation persists consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

In case of ingestion If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and if problems persist obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

4.2 Most important symptoms and effects, both acute and delayed

Most important symptoms are presented in section 2.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available

5.3 Advice for firefighters

No special measures required

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not required

6.2 Environmental precautions

No special measures required

6.3 Methods and materials for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Dispose contaminated material as waster according to item 13

Ensure adequate ventilation.

6.4 Reference to other sections

See section 7 for information on safe handling

See section 8 for information on personal protection equipment

See section 13 for disposal information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace

Prevent formation of aerosols.

Do not allow for substance to enter eyes/skin and or clothing.

Information about fire – and explosion protection:

No special measures required

7.2 Conditions for safe storage, including any incompatibilities

Store in closed container in a cool and dry well ventilated area.

Requirements to be met by storerooms and receptacles:

No special requirements

Information about storage in one common storage facility:

Not required

Further information about storage conditions:

Keep container tightly sealed

7.3 Specific end use(s)

No further relevant information available

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:

No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

| Component | CAS-NO. | Regulatory | Value | Parameters |
|-------------------------------------|------------|------------|-------|--|
| Phosphomolybdic acid dodecahydrate. | 51429-74-4 | OSHA | TWA | 5 mg/m ³ (as a molybdenum soluble compound) |

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

8.2.1 Appropriate engineering 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.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique

(Without touching glove's outer surface) to avoid skin contact with this product. Dispose of Contaminated gloves after use in accordance with applicable laws and good laboratory practices.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

No exact breakthrough time available.

Wash and dry hands.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection required if workplace exposure limits cannot be controlled/if ventilation or exhaust is not adequate. For nuisance exposures use type OV/AG (US) or type ABEK

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection:

Goggles recommended during refilling: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Additional Information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information:****Appearance:**

| | |
|------------------------|----------------|
| Form: | Liquid |
| Colour | Blue |
| Odour | Acetone-like |
| Odour threshold | Not determined |
| pH-Value | Not determined |

Change in condition:**Melting point/Melting range**

Undetermined

Boiling point/Boiling range

Undetermined

Flash point: Not applicable**Flammability (solid, gaseous)**

Not applicable

Ignition temperature:

Decomposition temperature

Not determined

Self-igniting

Product is not self-igniting

Danger of explosion

Product does not present an explosion hazard

Explosion limits:

Lower Not determined

Upper Not determined

Vapour pressure at 20°C 23 hPa

Density: Not determined

Relative density: Not determined

Vapour density: Not determined

Evaporation rate: Not determined

Solubility in / Miscibility with water:

Not miscible or difficult to mix

Partition coefficient (n-octanol/water):

Not determined

Viscosity:

Dynamic: Not determined

Kinematic: Not determined

Solvent content:

Organic solvents 0.0%

Water: 98.6%

VOC (EC): 0.0%

Solids Content 0.7%

9.2 Other safety information

No further relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications

10.3 Possibility of hazardous reactions

No dangerous reactions known

10.4 Conditions to avoid

No further relevant information available

10.5 Incompatible materials

Metals and strong bases

10.6 Hazardous decomposition products

Toxic phosphorous oxides may form if heated to dryness.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed or in contact with skin

Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation

Serious eye damage/irritation

Based on available data, the classification criteria are not met

Respiratory or skin sensitisation

May cause an allergic skin reaction

CMR Effects (Carcinogenicity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity

Based on available data, the classification criteria are not met

Carcinogenicity

Based on available data, the classification criteria are not met

Reproductive toxicity

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

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

No further relevant information available

12.2 Persistence and degradability

No further relevant information available

12.3 Bioaccumulative potential

No further relevant information available

12.4 Mobility in soil

No further relevant information available

Additional ecological information

General notes:

Generally not hazardous for water

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

No further relevant information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

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

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal

SECTION 14: Transport information

14.1. UN number

ADR, AND, IMDG, IATA

Not regulated

14.2. UN proper shipping name

ADR, AND, IMDG, IATA

Not regulated

14.3. Transport hazard class(es)

ADR, AND, IMDG, IATA

Not regulated

14.4. Packing group

ADR, IMDG, IATA

Not regulated

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

Not applicable

UN "Model Regulation"

Not regulated

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (Directive 2012/18/EU)

Named dangerous substances – ANNEX I None of the ingredients is listed

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out

SECTION 16: Other information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.