

# SAFETY DATA SHEET

Creation Date 26-Sep-2009

Revision Date 25-Dec-2021

Revision Number 5

### 1. Identification

**Product Name** 

# Phosphomolybdic acid, ammonium salt hydrate

Cat No. :

AC317100000; AC317100010; AC317100500; AC317102500

CAS No Synonyms

Recommended Use Uses advised against

Ammonium phosphomolybdate hydrate Laboratory chemicals. Food, drug, pesticide or biocidal product use.

54723-94-3

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

Company

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

**Emergency Telephone Number** 

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

### 2. Hazard(s) identification

#### **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 2 Category 2 Category 3

#### Label Elements

Signal Word Warning

Hazard Statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



#### **Precautionary Statements** Prevention

Wash face, hands and any exposed skin thoroughly after handling

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

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

#### Eves

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

### Storage

Store in a well-ventilated place. Keep container tightly closed

### Store locked up

### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None identified

## 3. Composition/Information on Ingredients

| Component                                   |                              | CAS No  | Weight %                                   |
|---|------------------------------|---|--|
| Phosphomolybdic acid, ammonium salt hydrate |                              | 54723-94-3  | >95  |
|   |                              |   |  |
|   | 4.                           | First-aid measures                                    |  |
| General Advice                              | If symptoms                  | persist, call a physician.                            |  |
| Eye Contact                                 | Rinse immed medical atten    | iately with plenty of water, also under th<br>tion.   | ne eyelids, for at least 15 minutes. Get   |
| Skin Contact                                | Wash off imm call a physicia | nediately with plenty of water for at leas<br>an.     | t 15 minutes. If skin irritation persists, |
| Inhalation                                  | Remove to free symptoms or   | esh air. If not breathing, give artificial re<br>cur. | spiration. Get medical attention if        |
| Ingestion                                   | Clean mouth symptoms or      | with water and drink afterwards plenty cour.          | of water. Get medical attention if         |
| Most important symptoms and effects         | None reason                  | ably foreseeable                                      |  |

#### Notes to Physician

Treat symptomatically

## 5. Fire-fighting measures

| Unsuitable Extinguishing Media               | No information available                             |
|--|--|
| Flash Point<br>Method -                      | No information available<br>No information available |
| Autoignition Temperature<br>Explosion Limits | No information available                             |
| Upper  | No data available                                    |
| Lower  | No data available                                    |
| Sensitivity to Mechanical Impact             |  |
| Sensitivity to Static Discharge              | No information available                             |

### Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx). Oxides of phosphorus. Ammonia.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

| <u>NFPA</u>     | Health<br>2         | <b>Flammability</b><br>0                                       | <b>Instability</b><br>0  | Physical hazards<br>N/A  |
|-----------------|---------------------|--|--|--|
|                 |                     | 6. Accidental re   | lease measures   |  |
| Personal        | Precautions         | Ensure adequate ventilatio                                     | n. Use personal protective equ                                     | ipment as required. Avoid dust   |
| Environm        | nental Precautions  | Should not be released into                                    | o the environment.   |  |
| Methods<br>Up   | for Containment and | <b>Clean</b> Sweep up and shovel into containers for disposal. | suitable containers for disposa                                    | I. Keep in suitable, closed  |
|                 |                     | 7. Handling a  | and storage  |  |
| Handling        |                     |  | equipment/face protection. Do not ventilation. Avoid ingestion and | not get in eyes, on skin, or on<br>d inhalation. Avoid dust formation. |
| Storage.        |                     |  | II-ventilated place. Keep conta<br>erated. Incompatible Material   | iner tightly closed. To maintain s. Strong reducing agents.            |
|                 | 3                   | 3. Exposure controls   | / personal protecti  | on   |
| Exposure        | e Guidelines        |  | ain any hazardous materials w<br>jion specific regulatory bodies.  |  |
| Engineer        | ing Measures        |  | n, especially in confined areas se to the workstation location.    | . Ensure that eyewash stations   |
| <u>Personal</u> | Protective Equipmen | <u>nt</u>  |  |  |
| Eye/fa          | ace Protection      |  | e eyeglasses or chemical safe<br>action regulations in 29 CFR 19   | ty goggles as described by<br>910.133 or European Standard             |

|                          | EN166.  |
|--------------------------|---|
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure.   |
| Respiratory Protection   | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Hygiene Measures         | Handle in accordance with good industrial hygiene and safety practice.  |

| 9. Pi | nysical an | d chemica | I properties |  |
|-------|------------|-----------|--------------|--|
|       |            | Powder Sc | olid         |  |

|  | <b>_</b> |  |
|--|----------|--|
| Physical State                         |          |  |
| Appearance                             |          |  |
| Odor                                   |          |  |
| Odor Threshold                         |          |  |
| рН                                     |          |  |
| Melting Point/Range                    |          |  |
| Boiling Point/Range                    |          |  |
| Flash Point                            |          |  |
| Evaporation Rate                       |          |  |
| Flammability (solid,gas)               |          |  |
| Flammability or explosive limits       |          |  |
| Upper                                  |          |  |
| Lower                                  |          |  |
| Vapor Pressure                         |          |  |
| Vapor Density                          |          |  |
| Specific Gravity                       |          |  |
| Solubility                             |          |  |
| Partition coefficient; n-octanol/water |          |  |
| Autoignition Temperature               |          |  |
| Decomposition Temperature              |          |  |
| Viscosity                              |          |  |
| Molecular Formula                      |          |  |
| Molecular Weight                       |          |  |
|  |          |  |

Yellow No information available No information available No information available No data available No information available No information available Not applicable No information available

No data available No data available No information available No information available Insoluble in water No data available No information available No information available Not applicable H12 Mo12 N3 O40 P . x H2 O 1876.35

# 10. Stability and reactivity

| ne known, based on information available  |  |  |
|---|--|--|
| ble under recommended storage conditions.   |  |  |
| ompatible products. Avoid dust formation.   |  |  |
| ong reducing agents   |  |  |
| Hazardous Decomposition Products Nitrogen oxides (NOx), Oxides of phosphorus, Ammonia |  |  |
| ardous polymerization does not occur.   |  |  |
| ne under normal processing.   |  |  |
|   |  |  |

# 11. Toxicological information

### Acute Toxicity

| Product Information                                  | No acute toxicity information is available for this product |
|--|---|
| Component Information<br>Toxicologically Synergistic | No information available                                    |
| Products<br>Delayed and immediate effects as w       | ell as chronic effects from short and long-term exposure    |

**Reproductive Effects** 

| rritation  |                             | Irritating to eyes a     | nd skin May cause  | irritation of respira | atory tract        |                      |
|--|-----------------------------|--------------------------|--------------------|-----------------------|--------------------|----------------------|
| Sensitization  |                             | No information available |                    |                       |                    |                      |
| Carcinogenicity  |                             | The table below in       | dicates whether ea | ach agency has list   | ted any ingredient | as a carcinoge       |
|  |                             |                          |                    |                       |                    |                      |
| Component  | CAS No                      | IARC                     | NTP                | ACGIH                 | OSHA               | Mexico               |
| Component<br>Phosphomolybdic<br>acid, ammonium salt<br>hydrate | <b>CAS No</b><br>54723-94-3 | IARC<br>Not listed       | NTP<br>Not listed  | ACGIH<br>Not listed   | OSHA<br>Not listed | Mexico<br>Not listed |

| Developmental Effects                              | No information available.                                      |
|--|--|
| Teratogenicity                                     | No information available.                                      |
| STOT - single exposure<br>STOT - repeated exposure | Respiratory system<br>None known                               |
| Aspiration hazard                                  | No information available                                       |
| Symptoms / effects,both acute and<br>delayed       | No information available                                       |
| Endocrine Disruptor Information                    | No information available                                       |
| Other Adverse Effects                              | The toxicological properties have not been fully investigated. |

| Other Adverse Effects | The toxicological properties have not been fully investigated. |
|-----------------------|--|
|                       |  |

No information available.

|  | 12. Ecological information  |
|--|---|
| Ecotoxicity<br>Do not empty into drains. |   |
| Persistence and Degradability            | Insoluble in water  |
| <b>Bioaccumulation/ Accumulation</b>     | No information available.   |
| Mobility                                 | Is not likely mobile in the environment due its low water solubility. |
|  | 13 Disposal considerations  |

|                        | 13. Disposal considerations  |
|------------------------|--|
| Waste Disposal Methods | Chemical waste generators must determine whether a discarded chemical is classified as a   |
|                        | hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. |

|                      | 14. Transport information  |
|----------------------|----------------------------|
| DOT                  | Not regulated              |
| DOT<br>_TDG<br>IATA_ | Not regulated              |
| IATA                 | Not regulated              |
| IMDG/IMO             | Not regulated              |
|                      | 15. Regulatory information |

### United States of America Inventory

| Component                                   | CAS No     | TSCA | TSCA Inventory notification -<br>Active-Inactive | TSCA - EPA Regulatory<br>Flags |
|---|------------|------|--|--------------------------------|
| Phosphomolybdic acid, ammonium salt hydrate | 54723-94-3 | -    | -  | -                              |

#### Legend:

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component             | CAS No     | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|-----------------------|------------|-----|------|--------|-------|------|------|------|-------|------|
| Phosphomolybdic acid, | 54723-94-3 | -   | -    | -      | -     | -    |      | -    | -     | -    |
| ammonium salt hydrate |            |     |      |        |       |      |      |      |       |      |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

#### U.S. Federal Regulations

| SARA 313   | Not applicable  |
|--|---|
| SARA 311/312 Hazard Categories   | See section 2 for more information                          |
| CWA (Clean Water Act)  | Not applicable  |
| Clean Air Act  | Not applicable  |
| <b>OSHA</b> - Occupational Safety and Health Administration  | Not applicable  |
| CERCLA   | Not applicable  |
| California Proposition 65  | This product does not contain any Proposition 65 chemicals. |
| U.S. State Right-to-Know<br>Regulations  | Not applicable  |
| <b>U.S. Department of Transportation</b><br>Reportable Quantity (RQ):<br>DOT Marine Pollutant<br>DOT Severe Marine Pollutant | N<br>N<br>N   |
| U.S. Department of Homeland<br>Security  | This product does not contain any DHS chemicals.            |
| Other International Regulations  |   |
| Mexico - Grade   | No information available                                    |
|  |   |

Authorisation/Restrictions according to EU REACH

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

| Component | CAS No | OECD HPV | Persistent Organic<br>Pollutant | Ozone Depletion<br>Potential | Restriction of<br>Hazardous<br>Substances (RoHS) |
|-----------|--------|----------|---------------------------------|------------------------------|--|
|-----------|--------|----------|---------------------------------|------------------------------|--|

| Phosphomolybdic acid, ammonium salt hydrate | 54723-94-3 | Not applicable  | Not applicable   | Not applicable                | Not applicable                        |
|---|------------|---|--|-------------------------------|---------------------------------------|
| Component                                   | CAS No     | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Major Accident<br>Notification | Seveso III Directive<br>(2012/18/EC) -<br>Qualifying Quantities<br>for Safety Report<br>Requirements | Rotterdam<br>Convention (PIC) | Basel Convention<br>(Hazardous Waste) |
| Phosphomolybdic acid, ammonium salt hydrate | 54723-94-3 | Not applicable  | Not applicable   | Not applicable                | Not applicable                        |

|  | 16. Other information  |
|--|--|
| Prepared By  | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com   |
| Creation Date<br>Revision Date<br>Print Date<br>Revision Summary | 26-Sep-2009<br>25-Dec-2021<br>25-Dec-2021<br>This document has been updated to comply with the US OSHA HazCom 2012 Standard<br>replacing the current legislation under 29 CFR 1910.1200 to align with the Globally<br>Harmonized System of Classification and Labeling of Chemicals (GHS). |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# End of SDS