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Structure Probe, Inc.
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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: December 14, 2016

02534-AB
SPI-Chem™ Phosphomolybdic Acid, CAS #51429-74-4

Section 1.1: Identification

Chemical Name/Synonyms ..... Phosphomolybdic Acid

Chemical family ..... chemical stain

CAS #'s ..... Product or Trade Name Phosphomolybdic Acid

CAS #'s 51429-74-4

Chemical Formula..... $H_3[P(Mo_3O_{10})4]\cdot H_2O$

Section 1.2: Relevant Uses/Restrictions

Intended use: Microscopy Laboratory Stain

Section 1.3: Supplier of the Safety Data Sheet

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Section 1.4: Emergency telephone number

Emergencies
Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...
Worldwide phone: 1-(703)-741-5970
Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

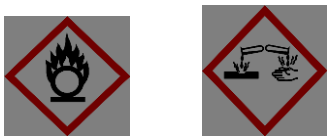
2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Oxidizing solids (Category 3)

Skin Corrosion (Category 1B)
Serious eye damage (Category 1)

GHS Label Elements:

Pictogram



Signal Word: Danger

Hazard Statements:

H272 May intensify fire.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary Statements:

P210 Keep away from heat.
P220 Keep/Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dust or mist
P264 Wash skin thoroughly after handling.
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: Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/ physician.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

2.3 Other Hazards:

Hazardous Material Information System USA

Health 3
Fire Hazard 0
Reactivity 3
Personal Protection .....

NFPA Rating (estimated)

Health 3
Flammability..... 0
Reactivity 2
Special ..... OX

Section 3: Composition

3.1 Substances:

Phosphomolybdic Acid	CAS# 51429-74-4	>99%

Section 4: First Aid Measures

4.1 Description of first aid measures:

General advice:
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled:
Move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: rinse throroghly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water, Consult a physician.

Special treatment needed: No data available.

Section 5: Fire Fighting Measures

5.1:Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2: Special hazards arising from the substance or mixture: Oxides of phosphorus, Molybdenum oxides.

5.3: Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Additional information: Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

General Information: Wear chemical safety goggles, face protection, appropriate protective gloves and protective clothing to prevent skin exposure, a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH or European Standard EN 149 (approved or equivalent), and full protective gear.

Spills/Leaks: Do not allow product to enter drains. Sweep up material and place in suitable disposal container. Keep all combustibles away from spilled material. Provide ventilation. Avoid raising dust.

Section 7: Handling and Storage

Handling: Wash thoroughly after handling. Use adequate ventilation. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin and clothing. Keep from contact with combustible materials. Minimize dust formation and accumulation. Avoid breathing dust.

Storage: Store in tightly closed container in cool, dry, well-ventilated area. Keep away from incompatible materials. Keep away from all combustible materials. Keep away from all reducing agents.

Section 8: Exposure Controls and Personal Protection

Engineering Controls: Eyewash station and safety shower required. Provide adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Phosphomolybdic acid	n/a	n/a	n/a

OSHA Vacated PELs:
None listed for this material.

Personal Protective Equipment

Eyes: Chemical safety goggles

Skin: Wear appropriate protective gloves to prevent skin contact.

Clothing: Wear appropriate protective clothing to prevent skin contact.

Respirators: If irritation or other symptoms are experienced, use a MSHA/NIOSH or European Standard EN 149 approved respirator.

Section 9: Physical and Chemical Properties

9.1: Information on basic physical and chemical properties

Appearance: Crystalline
Color: Yellow
Odor: No data available
pH: No data available
Melting point: 79 – 90°C (174 – 194°F)
Freezing point: No data available
Relative density: 1.62 g/ml @25°C
Autoignition temperature: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: This substance is classified as oxidizing with the category 3.
Formula: $H_3[P(Mo_3O_{10})4]\cdot H_2O$
auto-ignition temperature

9.2 Other information: No additional information available.

Section 10: Stability and Reactivity

Reactivity: No data available.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available.

Conditions to avoid: No data available.

I**ncompatible materials:** Organic materials, powdered metals.

Hazardous decomposition products: No data available.

Section 11: Toxicological Information

Acute toxicity: No data available.
Inhalation: No data available.
Dermal: No data available

Skin corrosion/irritation: No data available.

Serious eye damage / eye irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: Not listed as a carcinogen by IARC, ACGIH, NTP, OSHA.

Section 12: Ecological Information

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.

Section 13: Disposal Considerations

13.1 Waste treatment methods
Burn in a chemical incinerator equipped with an afterburner and scrubber, but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of contaminated packaging same as disposal of unused product.

Section 14: Transport Information

US DOT

UN number: 3084
Class: 8 (5.1)
Packing Group: II
Proper shipping name: Corrosive solids, oxidizing, n.o.s. (Phosphomolybdic acid hydrate)

IATA
UN number: 3084
Class: 8 (5.1)
Packing Group: II
Proper shipping name: Corrosive solids, oxidizing, n.o.s. (Phosphomolybdic acid hydrate)

Section 15: Regulatory Information

SARA 302 Components:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:
This material does not contain any chemical components with know CAS numbers that exceed the threshold Ode Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:
Acute Health Hazard

State Right To Know:
CAS # 51428-74-4 is listed on the PA and NJ Right to Know Lists.

California Prop. 65 Components:
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Abbreviations and acronyms
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IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bio-accumulative and Toxicological

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such

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