

Phosphomolybdic-Phosphotungstic Acid Solution

1. Identification

Product Name: Phosphomolybdic-Phosphotungstic Acid

Item #:

Solution

Synonyms: N/A

Recommended Use: Special Stain

Restrictions on Use: N/A

Manufacturer/Supplier:

In Case of Emergency:

Avantik

Chemtrec US 1-800-424-9300

19 Chapin Road - Building C

Chemtrec International 703-527-3887

Pine Brook, NJ 07058

800-783-9424

2. Hazards Identification

OSHA Hazard Classification(s):

Skin Corrosion - Category 1A

Eye Damage - Category 1

Oxidizing Liquids - Category 3

Signal Word: Danger

Hazard Statement(s): Causes severe skin burns and eye damage. Causes serious eye damage. May intensify fire; oxidizer.

Pictogram(s):



Precautionary Statement(s): Prevention: Do not breathe dusts or mists. Wash body thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection. Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles and/or incompatible materials. Wear protective gloves, eye protection, face protection. Wear flame resistant clothing.

Response: If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a doctor. Specific treatment (see first aid section on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing In case of fire: Use water, dry chemical, CO2 or foam to extinguish.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

Descriptions of Hazards not otherwise classified: N/A

Percent of mixture with unknown acute toxicity: N/A

3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Phosphomolybdic Acid		51429-74-4	Trade Secret
Phosphotungstic Acid		12501-23-4	Trade Secret
Water		7732-18-5	Trade Secret

4. First Aid Measures

Eye Contact: 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 immediately.

Skin Contact: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention immediately.

Phosphomolybdic-Phosphotungstic Acid Solution

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

Ingestion: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention immediately.

Symptoms: Irritation eyes, nose, throat; headache, dizziness. Chemical burns or redness to skin.

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell.

5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.

Fire Hazards (Chemical): Not flammable.

Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.

Precautions for Firefighters: Fire fighters should use self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Protective Equipment: See section 8

Environmental Precautions: Prevent release to the environment by using barriers.

Containment and Clean-Up Procedures: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.

Storage: Store locked up. Store in a well-ventilated, cool place. Keep lid tightly closed.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Phosphomolybdic Acid	51429-74-4	15mg/m ³ (as Mo)

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Phosphomolybdic Acid	51429-74-4	10 mg/m ³ (as Mo)	
Phosphotungstic Acid	12501-23-4	5 mg/m ³ (as W)	10mg/m ³ (as W)

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

Appearance: Colorless, Liquid

Molecular Weight: N/A

Molecular Formula: N/A

pH: 1.6-1.8

Boiling Point and Boiling Range: N/A

Melting Point/Freezing Point: N/A

Flash Point: N/A

Specific Gravity/Relative Density: 1.038

Phosphomolybdic-Phosphotungstic Acid Solution

Odor: N/A
Odor Threshold: N/A
Color: Colorless
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: N/A
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity: N/A
Chemical Stability: Stable
Conditions of Stability/Instability: N/A
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: N/A
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure

Eyes: Corrosive solution.. May cause permanent damage to cornea, redness and pain in eyes. May cause blindness.
Skin: Corrosive solution. May cause permanent damage to skin, redness, pain. Causes chemical burns.
Inhalation: Dizziness, headache. Corrosive solution. Inhalation may irritate or burn inside nostrils. May irritate respiratory.
Ingestion: Corrosive solution. May chemically burn mouth, throat, stomach, and digestive tract. Do not swallow.

Signs or Symptoms of Exposure: Nausea, dermatitis, headaches.

Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.

Acute Toxicity (Numerical Measures): Phosphotungstic Acid: LD50(oral,rat)=3300 mg/kg

Carcinogenicity (NTP, IARC, OSHA): Does not contain any known carcinogen.

12. Ecological Information

Ecotoxicity: N/A
Persistence and degradability: N/A
Bioaccumulation Potential (octanol-water partition coefficient, BCF): N/A
Mobility in the soil: N/A
Adverse Environmental Effects: N/A

13. Disposal Considerations

Phosphomolybdic-Phosphotungstic Acid Solution

Recommended Disposal Containers: Check with your local waste authorities.*

Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*

Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*

Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: UN3264

UN Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, n.o.s. (Phosphomolybdic Acid Hydrate)

Transport Hazard Class(es): 8

Packing Group Number: II

Environmental Hazards (IMDG code):

Marine Pollutant: No

Transport in Bulk (IBC Code): N/A

Special Transport Precautions: N/A

15. Regulatory Information

OSHA:

DOT:

EPA:

CPSC:

Phosphomolybdic-Phosphotungstic Acid Solution

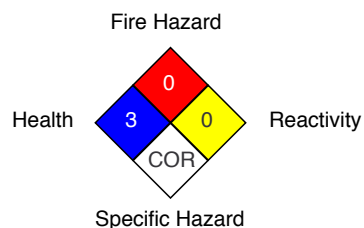
16. Other Information

Revision Date: 03/20/2015

NFPA

Health	3
Fire Hazard	0
Reactivity	0
Specific Hazard	COR

National Fire Protection Association (USA) NFPA



HMIS

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.