

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Initial preparation date: : 11.13.2014**Phosphate VM Reagent****SECTION 1: Identification of the substance/mixture and of the supplier****Product name:** Phosphate VM Reagent**Manufacturer/Supplier Article number:** PV6500SS**Recommended uses of the product and restrictions on use:** Laboratory chemicals**Manufacturer Details:**

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover, PA 17331
1-717-632-1291

Emergency telephone number:**ChemTel: (24-hour)**

+1(800)255-3924

+1(813)248-0585 (International)

SECTION 2: Hazards identification**Classification of the substance or mixture:****Environmentally Damaging**

Corrosive to metals, category 1

**Corrosive**

Skin corrosion, category 1A

Serious eye damage, category 1

Corr. to Metals 1.

Skin. Corr. 1A.

Eye. Damage 1.

Signal word: Danger**Hazard statements:**

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

Precautionary statements:

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

Keep only in original container.

Wash skin thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

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

Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Absorb spillage to prevent material damage.

Store locked up.

Dispose of contents and container as instructed in Section 13.

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Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients**Ingredients:**

Ingredients:		
CAS 7664-93-9	Sulfuric Acid, ACS	12 %
CAS 12054-85-2	Ammonium Molybdate	3 %
CAS 7732-18-5	Water, purified	84 %
CAS 12027-67-7	Ammonium Metavanadate	1 %
Percentages are by weight		

SECTION 4: First aid measures**Description of first aid measures****After inhalation:** None**After skin contact:**

Continue rinsing while removing contaminated clothing and shoes. Immediately seek medical attention.

After eye contact:

Immediately seek medical attention. Continue rinsing eyes during transport to hospital.

After swallowing:

Immediately seek medical attention.

Most important symptoms and effects, both acute and delayed:

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, pulmonary edema. Vomiting. Stomach - Irregularities - Based on Human Evidence.

Indication of any immediate medical attention and special treatment needed: None**SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing agents:**

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

Unsuitable extinguishing agents:

None identified.

Special hazards arising from the substance or mixture:

May react with most metals to form hydrogen gas which can form explosive mixtures with air.

Advice for firefighters:**Protective equipment:**

Use normal procedures. Use protective clothing. Use NIOSH approved breathing equipment.

Additional information (precautions): None

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Phosphate VM Reagent**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:** None**Environmental precautions:** None**Methods and material for containment and cleaning up:**

Soak up with inert absorbent material and dispose of as hazardous waste.

Reference to other sections: None**SECTION 7: Handling and storage****Precautions for safe handling:**

Wash hands after handling. Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities:

Protect from freezing and physical damage.

SECTION 8: Exposure controls/personal protection**Control parameters:**7664-93-9, Sulfuric Acid, ACS., OSHA PEL: 1 mg/m³.7664-93-9, Sulfuric Acid, ACS., ACGIH TLV: 1 mg/m³.12054-85-2, Ammonium Molybdate, ACGIH-TLV 5 mg(Mo)/m³ (Soluble) (TWA).12054-85-2, Ammonium Molybdate, OSHA-PEL 5 mg(Mo)/m³ (Soluble), 15 mg(Mo)/m³ (Total Dust) (TWA).12027-67-7, Ammonium Metavanadate, NIOSH OEL .05 mg/m³ Ceiling.**Appropriate engineering controls:** None**Respiratory protection:** None**Protection of skin:** None**Eye protection:** Face shield and tight fitting goggles are appropriate eye protection.**General hygienic measures:** None**SECTION 9: Physical and chemical properties**

Appearance (physical state, color):	Clear, Yellow Liquid	Explosion limit lower:	Not determined
		Explosion limit upper:	Not determined
Odor:	Odorless	Vapor pressure at 20°C:	Not determined
Odor threshold:	Not determined	Vapor density:	Not determined
pH-value:	Not determined	Relative density:	Not determined
Melting/Freezing point:	Approximately 0° C	Solubilities:	Infinite.
Boiling point/Boiling range:	Approximately 100° C	Partition coefficient (n-octanol/water):	Not determined
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined
Evaporation rate:	Not determined	Decomposition temperature:	Not determined
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined
Density at 20°C:	Approximately 1 g/cm ³ (8.345 lbs/gal) at 20 °C (68 °F)		

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May react with metals to form flammable hydrogen gas.

Chemical stability:

Stable under normal conditions of use and storage.

Possible hazardous reactions: None**Conditions to avoid:**

Ignition sources, excess heat.

Incompatible materials:

Heat and contact with bases, oxidizers, reducing agents, and metal powders.

Hazardous decomposition products:

Nitrogen oxides, ammonia, and metal fumes.

SECTION 11: Toxicological information**Acute Toxicity:** No additional information.**Chronic Toxicity:** No additional information.**Skin corrosion/irritation:**

Skin - Rabbit Result: Extremely corrosive and destructive to tissue 7664-93-9.

Serious eye damage/irritation:

Eyes - Rabbit Result: Corrosive to eyes 7664-93-9.

Respiratory or skin sensitization: No additional information.**Carcinogenicity:** No additional information.**Germ cell mutagenicity:** No additional information.**Reproductive Toxicity:** No additional information.**STOT-single and repeated exposure:** No additional information.**Additional toxicological information:**

No additional information.

SECTION 12: Ecological information**Ecotoxicity:**

7664-93-9, LC50 - *Gambusia affinis* (Mosquito fish) - 42 mg/l - 96 h.

7664-93-9, EC50 - *Daphnia magna* (Water flea) - 29 mg/l - 24 h.

Persistence and degradability: No additional information.**Bioaccumulative potential:** No additional information.**Mobility in soil:** No additional information.**Other adverse effects:** No additional information.**SECTION 13: Disposal considerations****Waste disposal recommendations:**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

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ADR, ADN, DOT, IMDG, IATA 1760

Limited Quantity Exception: None**Bulk:****RQ (if applicable):** None**Proper shipping Name:** Corrosive Liquids, N.O.S., (Sulfuric Acid Solution).**Hazard Class:** 8**Packing Group:** III.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**Non Bulk:****RQ (if applicable):** None**Proper shipping Name:** Corrosive Liquids, N.O.S., (Sulfuric Acid Solution).**Hazard Class:** 8**Packing Group:** III.**Marine Pollutant (if applicable):** No additional information.**Comments:** None**SECTION 15: Regulatory information****United States (USA)****SARA Section 311/312 (Specific toxic chemical listings):**

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

7664-93-9 Sulfuric acid.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act) :

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

7664-93-9 Sulfuric acid 1000 lbs.

12027-67-7 Ammonium Metavanadate 1000 lbs.

Proposition 65 (California):**Chemicals known to cause cancer:**

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

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Initial preparation date: : 11.13.2014**Phosphate VM Reagent****Canada****Canadian Domestic Substances List (DSL) :**

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance within GHS guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 2-0-0**HMIS:** 2-0-0**GHS Full Text Phrases:** None**Abbreviations and Acronyms:** None