MATERIAL SAFETY DATA SHEET

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: M-Prep Conditioner A

Vishay Micro-Measurements
Post Office Box 27777
Raleigh, NC 27611

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)
703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>CHEMICAL IDENTITY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>7664-38-2</td>
<td>Phosphoric Acid</td>
<td>5.0-6.0</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Distilled Water</td>
<td>93.5-94.9</td>
</tr>
</tbody>
</table>

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: YES  Skin: YES  Ingestion: Accidental

Health Hazards (Acute and Chronic): None known.

Carcinogenicity: NTP: Not listed
IARC Monographs: Not listed
OSHA Regulated: Not listed

Signs and Symptoms of Exposure:

INHALATION: May cause severe irritation of respiratory system. In confined areas, vapors in high concentrations are anesthetic. Over-exposure may result in light-headedness and staggering gait. Mist may cause coughing, sneezing, salivation, and difficult breathing.
EYE CONTACT: May cause severe irritation or burns.

SKIN CONTACT: May cause severe irritation or burns.

INGESTION: May cause burns to mouth, throat, and stomach.

Conditions Generally Aggravated by Exposure: None identified.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Prompt action is essential.

EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least fifteen minutes. Seek medical aid.

SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least fifteen minutes while removing contaminated clothing and shoes. Wash clothing before re-use.

INGESTION: CALL A PHYSICIAN. If swallowed, do NOT induce vomiting. If conscious, give water, milk, or milk of magnesia.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None

Flammable limits: LEL: N/A UEL: N/A

Extinguishing Media: Will not support combustion or burn.

Special Firefighting Procedures: If product is present in a fire, avoid exposure to skin and eyes from mists and splashes. Firefighters should wear standard protective clothing and adequate respiratory protection.

Unusual Fire and Explosion Hazards: May react with some metals including aluminum, magnesium, and zinc, resulting in evolution of hydrogen gas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Ventilate area. Absorb with absorbent material. Flush spill area with plenty of water.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Self-contained breathing apparatus is recommended for emergency use.
Ventilation:

Local Exhaust: Keep below TLV
Mechanical: Keep below TLV
Special: N/A
Other: N/A

Protective Gloves: Chemical resistant or rubber gloves recommended.

Eye Protection: Chemical safety glasses and faceshield recommended.

Other Protective Clothing or Equipment: Rubber apron or suitable protective clothing. Eye wash station and safety shower should be available in the work area.


SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Store below 80°F (27°C). Keep containers tightly sealed. Avoid storing or mixing with materials containing chlorine.

Other Precautions: Avoid eye and skin contact. Avoid breathing mist.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 210°F to 212°F (99°C to 100°C)
Vapor Pressure (mmHg): N/A
Vapor Density (Air = 1): N/A
Specific Gravity (H₂O = 1): ≈ 1-1.1
Melting Point: N/A
Evaporation Rate (BuAc = 1): <1
Volatile Organic Compounds: None
Solubility in Water: Complete

Appearance and Odor: Clear to slightly turbid liquid; no odor.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: N/A

Incompatibility (Materials to Avoid): Alkaline materials and materials containing chlorine.

Hazardous Decomposition or By-products: Oxides of phosphorous.

Hazardous Polymerization: Will not occur.
SECTION 11: TOXICOLOGICAL INFORMATION

Phosphoric Acid

OSHA PEL: 1 mg/m³ (TWA)
ACGIH TLV: 1 mg/m³
OTHER: N/A

Distilled Water

OSHA PEL: Not established
ACGIH TLV: Not established
OTHER: Not established

SECTION 12: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with local, state, and federal environmental regulations.

SECTION 13: TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>SHIPPING NAME</th>
<th>CLASS</th>
<th>PACKING GROUP</th>
<th>UN NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosive Liquid, N.O.S. (Phosphoric Acid)</td>
<td>8</td>
<td>III</td>
<td>1760</td>
</tr>
</tbody>
</table>

SECTION 14: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION:

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

<table>
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<th>CHEMICAL NAME</th>
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<td>Phosphoric Acid</td>
<td>5.0-6.0</td>
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</table>

TSCA NOTIFICATION:

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).
SECTION 15: OTHER INFORMATION

To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Vishay Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.