MATERIAL SAFETY DATA SHEET

REMEL: Regional Media Laboratories, Inc.
12076 Santa Fe Drive
P.O. Box 14428
Lenexa, Kansas 66215

SECTION I-IDENTIFICATION

Trade Name: PVA Modified
Vendor: Remel
Revision No.: 5
Date Revised: 02/21/89
Formula: Mixture.

SECTION II-HAZARDOUS INGREDIENTS

Material: Cupric Sulfate  Ethanol  Acetic Acid  PVA Powder
CAS #: 7758-99-8     64-17-5   64-19-7   25213-24-5
Wt. #: 1.25  31    5   5
Nature of Hazard: POISON-CORROSIVE-FLAMMABLE.

SECTION III-PHYSICAL DATA

<table>
<thead>
<tr>
<th></th>
<th>Cupric Sulfate</th>
<th>Ethanol</th>
<th>Acetic Acid</th>
<th>PVA Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point:</td>
<td>N/A</td>
<td>170°C</td>
<td>118°C</td>
<td>340°C</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>N/A</td>
<td>27</td>
<td>11</td>
<td>Negligible.</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>N/A</td>
<td>1.58</td>
<td>2.1</td>
<td>1.52</td>
</tr>
<tr>
<td>Appearance and Odor:</td>
<td>N/A</td>
<td>Water.</td>
<td>Colorless</td>
<td>White powder.</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>N/A</td>
<td>N/A</td>
<td>16.7</td>
<td>220°C</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>2.284</td>
<td>.815</td>
<td>.05</td>
<td>1.329</td>
</tr>
<tr>
<td>% Volatile by Volume:</td>
<td>Unknown.</td>
<td>&gt;99</td>
<td>100</td>
<td>Unknown.</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>Unknown.</td>
<td>1.7</td>
<td>.97</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(ether=1)

SECTION IV-FIRE AND EXPLOSION DATA

<table>
<thead>
<tr>
<th></th>
<th>Cupric Sulfate</th>
<th>Ethanol</th>
<th>Acetic Acid</th>
<th>PVA Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point:</td>
<td>N/A</td>
<td>&lt;60°TCC</td>
<td>106°F</td>
<td>230°F</td>
</tr>
<tr>
<td>Explosive Limits:</td>
<td>Non-combustible.</td>
<td>LEL 3.3</td>
<td>LEL 5.4</td>
<td>Non-combustible.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UEL 19.0</td>
<td>UEL 16.0</td>
<td></td>
</tr>
</tbody>
</table>

Extinguishing Media: Carbon dioxide, dry chemical or foam.
Special Fire-fighting Procedures: Wear self-contained breathing apparatus and protective equipment.
Unusual Fire and Explosive Data: Emits toxic fumes when heated to decomposition.

SECTION V-HEALTH HAZARD AND EMERGENCY

<table>
<thead>
<tr>
<th></th>
<th>Cupric Sulfate</th>
<th>Ethanol</th>
<th>Acetic Acid</th>
<th>PVA Powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold Limit Value:</td>
<td>N/A</td>
<td>1,000 ppm</td>
<td>10 ppm</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

Hazards and First Aid Procedures: Harmful or fatal if swallowed. Causes burns, avoid eye and skin contact. May cause irritation to eyes, nose, throat, lungs and mucous membranes. Can cause drowsiness, tremor, fatigue, dizziness, nausea, narcosis and mental confusion.
Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration. Call physician.
Eye/Skin Contact: Flush immediately with copious amounts of water for at least 15 minutes. Remove contaminated clothing. Call physician.
Ingestion: Do not induce vomiting. If victim is conscious, give water, milk or milk of magnesia. Call physician.
SECTION VI-REACTIVITY

Stability: Stable.
Incompatibility: Oxidizers, nitric acid, strong caustics, amines, alkalies.
Hazardous Polymerization: Will not occur.
Hazardous Decomposition Products: Toxic fumes of sulfur oxide.
Conditions to Avoid: Strong oxidizers, extreme heat and flame.

SECTION VII-SPILL AND DISPOSAL

Spill Procedures: Wear protective equipment as specified in Section VIII. Remove all sources of ignition. Contain spill and absorb with inert material. Scoop up and place in approved DOT container.
Disposal Procedures: Dispose by means which comply with all local, state, and federal regulations or contact an approved and licensed disposal agency.

SECTION VIII-PROTECTION DATA

Eyes: Chemical safety goggles.
Gloves: Chemical resistant gloves.
Respiratory: Self-contained breathing apparatus or mask with activated carbon cartridges which meet NIOSH/MSHA approval.
Ventilation: Mechanical exhaust.
Other: Fume hood.

SECTION IX HANDLING AND STORAGE

Store at room temperature away from all sources of ignition and oxidizing materials. Keep container closed.

SECTION X-MISCELLANEOUS DATA

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Remel shall not be held liable for any damage resulting from handling or contact with the above product.