Material Safety Data Sheet
Date Printed: 12/02/2006
Date Updated: 01/26/2006
Version 1.50

Section 1 - Product and Company Information

Product Name: POLYVINYL ALCOHOL MOUNTING MEDIUM WITH DASCO, ANTIAGING
Product Number: 10981
Brand: Fluka Chemical
Company: Sigma-Aldrich
Street Address: 3500 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5652
Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
<th>EC no</th>
<th>Annex I Index Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYVINYL ALCOHOL MOUNTING MEDIUM WITH DASCO, ANTIAGING</td>
<td>None</td>
<td>No</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>Percent</th>
<th>SARA 313</th>
<th>EC no</th>
<th>Annex I Index Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYVINYL ALCOHOL</td>
<td>9002-89-5</td>
<td>&gt; 10.000 %</td>
<td>313</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>HYDROCHLORIC ACID &gt;=25%</td>
<td>7647-01-0</td>
<td>&lt; 15.000 %</td>
<td>313</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1,4-CHLOROBICYCLO(2.2.2)OCTANE</td>
<td>280-57-9</td>
<td>&lt; 10.000 %</td>
<td>313</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Formula: Synonyms:

Section 3 - Hazards Identification

Emergency Overview
Harmful. Harmful if swallowed. Irritating to eyes, respiratory system and skin.

HMIS Rating
Health: 2 Flammability: 1 Reactivity: 0

NFPA Rating
Health: 2 Flammability: 1 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Section 5 - Fire Fighting Measures

Flash Point: 212 °F 100 °C
Autoignition Temp: N/A

Extinguishing Media
Suitable: Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Extinguishes toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Methods for Cleaning Up
Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure: Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable: Keep tightly closed. Store at 2-8°C.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU) Respiratory protection is not required. Where protection is desired, use half-mask combination (US) or type ABEK (EN 14387) respirator cartridges.

Hand
Protective gloves.

Eye
Chemical safety goggles.

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Sigma-Aldrich Corporation
www.sigma-aldrich.com
Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Color</th>
<th>Form</th>
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</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>N/A</td>
<td>Almost colourless</td>
<td>Paste</td>
</tr>
<tr>
<td>pH</td>
<td>8.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP/EP Range</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP/MP Range</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturated Vapor Conc.</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG/Density</td>
<td>1.08 g/cm³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk Density</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volatile%</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Content</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solvent Content</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition Temp.</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point °F</td>
<td>212°C</td>
<td>Method: closed cup</td>
<td></td>
</tr>
<tr>
<td>Flash Point °C</td>
<td>100°C</td>
<td>Method: closed cup</td>
<td></td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
<td></td>
<td></td>
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<tr>
<td>Autoignition Temp</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.381</td>
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<tr>
<td>Solubility</td>
<td>N/A</td>
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</tr>
</tbody>
</table>

N/A = not available

Section 11 - Toxicological Information

Route of Exposure
- Skin Contact: May cause skin irritation.
- Skin Absorption: May be harmful if absorbed through the skin.
- Eye Contact: May cause eye irritation.
- Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
- Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTCS Number: N/A

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
- Contact a licensed professional waste disposal service to dispose of this material.
- Dispose of the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
- Proper Shipping Name: None
- Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
- Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

US Classification and Label Text
- Indication of Danger: Harmful.
- Risk Statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.
- Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

United States Regulatory Information
- SARA Listed: No

Canada Regulatory Information
- WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2006 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.