Starting Formulation

SF 2500
Clear Bake Coating
EPI-REZ™ Resin 3522-W-60

Formula | Material | Supplier | Pounds | Gallons |
---|---|---|---|---|
EPI-REZ Resin 3522-W-60 | Hexion | 637.50 | 69.29 |

Thoroughly pre-mix the following and add to the above under gentle agitation.

| Formula | Material | Supplier | Pounds | Gallons |
---|---|---|---|---|
Cymel 324 | Cytec Industries | 53.1 | 5.71 |
Butyl OXITOL™ Glycol Ether | Shell Chemical Co. | 22.5 | 3.00 |
2-Propoxylethanol | | 40.2 | 5.00 |
BYK-301 Anti-cratering agent | BYK-Chemie USA | 2.0 | 0.25 |
Nacure XP333 (catalyst) | King Industries | 2.75 | 0.37 |

Blend thoroughly.

Dissolve following by warming to 150 °F. Then add to above under agitation before allowing to cool.

| Formula | Material | Supplier | Pounds | Gallons |
---|---|---|---|---|
Dicynadiamide | Cytec Industries | 13.5 | 0.41 |
Deionized water | | 133.0 | 15.97 |

Total Formulation

Dissolve following by warming to 150 °F. Then add to above under agitation before allowing to cool.

Mixing Instructions

| Formula | Material | Supplier | Pounds | Gallons |
---|---|---|---|---|
Total Formulation | | 904.55 | 100.00 |

Typical Formulation Properties

| Properties | Units | Value |
---|---|---|
Nonvolatile content by weight | % | 48.5 |
Nonvolatile content by volume | % | 43.2 |
Weight per gallon | lb/gal | 9.05 |
Viscosity @ 25°C | KU | 57 |
Water | lb/gal | 388.0/46.5 |
Organics | lb/gal | 62.78/0.00 |

Volatile Organic Compounds (VOC)
Typical Film Properties

<table>
<thead>
<tr>
<th>Units</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cure Schedule</td>
<td>min./°F</td>
<td>5/450</td>
<td>30/400</td>
<td>15/400</td>
</tr>
<tr>
<td>Reverse Impact</td>
<td>in.-lbs</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>Direct Impact</td>
<td>in.-lbs</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>MEK Rubs</td>
<td>100 = HB</td>
<td>100 = 3H</td>
<td>100 = 2B</td>
<td>100 = 6B</td>
</tr>
<tr>
<td>Pencil Hardness</td>
<td>4H</td>
<td>5H</td>
<td>5H</td>
<td>4H</td>
</tr>
<tr>
<td>Adhesion</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

1 Films cast #42 Myra Bar (0.75 mil.) on Bonderite 1000; 10 min. flash.

2 Those greater than 400 °F recover loss rapidly; those under 400 °F do not.

Films are subject to flash rusting at intrinsic pH. To avoid flash rusting pH may be adjusted to either 6.0 by addition of glacial acetic acid or to 9.0 by addition of dimethylethanolamine. 1

Films will appear ‘seedy’ after flashing and prior to baking.

1 Supplied by Union Carbide Corp.

Table 3 / Stability Information

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Coating</th>
<th>pH</th>
<th>Films</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 week at 75 °F</td>
<td>Settles</td>
<td>7.2</td>
<td>OK</td>
</tr>
<tr>
<td>1 week at 125 °F</td>
<td>Settles</td>
<td>9.5</td>
<td>OK</td>
</tr>
<tr>
<td>2 weeks at 75 °F</td>
<td>Settles</td>
<td>7.8</td>
<td>OK</td>
</tr>
<tr>
<td>2 weeks at 125 °F</td>
<td>Settles</td>
<td>9.0</td>
<td>Unstable</td>
</tr>
<tr>
<td>Freeze / Thaw</td>
<td>4 cycles</td>
<td>7.0</td>
<td>OK</td>
</tr>
</tbody>
</table>

Storage Recommendations regarding storage conditions can be obtained by visiting our web site at www.hexion.com

General Information

These are starting formulations and are not proven in the user’s particular application but are simply meant to demonstrate the efficacy of the products and to assist in the development of the user’s own formulation. It is the user’s responsibility to fully-test and qualify the formulation, along with the ingredients, methods, applications or equipment identified herein (“Information”), by the user’s knowledgeable formulator or scientist, and to determine the appropriate use conditions and legal restrictions, prior to use of any Information.

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

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