## Starting Formulation

### SF 2804

**Clear Powder Coating**  
**EPON™ Resin 2024 / EPIKURE™ Curing Agent P-108**

### Features
- Very good general purpose powder coating  
- Good film appearance  
- Rapid cure speed  
- Very good storage stability

### Formula

<table>
<thead>
<tr>
<th>Material</th>
<th>Supplier</th>
<th>Pounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPON Resin 2024</td>
<td>Hexion</td>
<td>953.0</td>
</tr>
<tr>
<td>EPIKURE Curing Agent P-108</td>
<td>Hexion</td>
<td>47.0</td>
</tr>
<tr>
<td>Total Weight</td>
<td></td>
<td>1000.0</td>
</tr>
</tbody>
</table>

### Mixing Instructions

- **Total Weight**  
  - Pounds: 1000.0

Powder coatings are generally manufactured by the melt mix technique. The highest level of gloss and performance for thin film applications is achieved by the melt mix method. All the components are dry blended, usually in a high intensity mixer. This homogeneous blend is processed through an appropriate single or twin-screw extruder and cooled to a friable solid. The dispersed extrudate is then pulverized to yield a suitable particle size distribution and sieved to eliminate coarse particles which could detract from the appearance of the coating.

### Typical Handling Properties

Powder coatings can be applied by electrostatic spray, fluidized bed, electrostatic fluidized bed, and flocking gun methods. The electrostatic techniques are recommended where the optimum in film appearance is desired at thin film thicknesses. Further improvements in appearance can be realized if the substrate is heated prior to application of powder. This heating of the substrate allows the coating to achieve minimal viscosity before curing begins.

This coating will cure in 5 to 7 minutes at 400 °F or 10 to 15 minutes at 350 °F.

### Typical Formulation Properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bake schedule</td>
<td>min./°F</td>
<td>15/350</td>
</tr>
<tr>
<td>Reverse impact resistance, Gardner</td>
<td>in•lb</td>
<td>pass 160</td>
</tr>
<tr>
<td>Flexibility, Zuhr Conical Mandrel</td>
<td>pass 1/8”</td>
<td></td>
</tr>
<tr>
<td>Pencil hardness, ASTM D 3363</td>
<td>pass 5H</td>
<td></td>
</tr>
</tbody>
</table>

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Cross hatch adhesion, 1/8" squares pass

Solvent resistance

MIBK hrs pass 2
MEK min. pass 8

Gloss, 60° % 100

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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