# Starting Formulation

**SF 2803**

**Low Temperature Cure White Powder Coating**

**EPON™ Resin 2024 / EPIKURE™ Curing Agent P-101**

## Suggested Uses
- Excellent general purpose powder coating

## Features
- Good film appearance
- Low temperature cure
- Excellent 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>652.0</td>
</tr>
<tr>
<td>EPIKURE Curing Agent P-101</td>
<td>Hexion</td>
<td>19.5</td>
</tr>
<tr>
<td>Ti-Pure R-900</td>
<td>E.I. DuPont de Nemours &amp; Company, Inc.</td>
<td>322.0</td>
</tr>
<tr>
<td>Cab-O-Sil®</td>
<td>Cabot Corporation.</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**Total Formulation**: 1,000.0

## Mixing Instructions

Powder coatings are generally manufactured by the melt mix technique. 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

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 thickness. Further improvements in appearance can be realized if the substrate is heated prior to application of powder. Heating the substrate allows the coating to achieve minimal melt viscosity before curing begins.

This coating will cure in 30 minutes at 250 °F, or 5 minutes at 300 °F.

## Typical Formulation

<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>30/250</td>
</tr>
<tr>
<td>Reverse impact resistance, Gardner</td>
<td>in/lb</td>
<td>Pass 40</td>
</tr>
</tbody>
</table>
Flexibility, Zuhr Conical Mandrel in Pass 1/8
Pencil hardness, ASTM D3363 Pass 5H
Cross hatch adhesion, 1/8-inch squares Pass
Solvent resistance
MEK, double rubs Pass 100 +
Gloss, 60° % 100

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.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on Hexion Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and MSDSs on non-Hexion products should be obtained from the respective manufacturer.

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