## Starting Formulation

### SF 2017

**Gray Appliance Primer**  
EPON™ Resin 1007F / Beckamine 21-511

### Features
- Good color and color retention
- Outstanding adhesion
- Excellent detergent resistance; will consistently pass 300 hours immersion in 1% detergent solution at 165 °F

### Formula

<table>
<thead>
<tr>
<th>Material</th>
<th>Supplier</th>
<th>Pounds</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ti-Pure R-902</td>
<td>Du Pont Co.</td>
<td>76.3</td>
<td>2.29</td>
</tr>
<tr>
<td>Superjet Carbon Black LB-1011</td>
<td>Harcros Pigments, Inc.</td>
<td>0.9</td>
<td>0.06</td>
</tr>
<tr>
<td>EPON Resin 1007F solution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPON Resin 1007F</td>
<td>Hexion</td>
<td>226.7</td>
<td>22.88</td>
</tr>
<tr>
<td>Ethyl-3-ethoxy propionate</td>
<td></td>
<td>92.75</td>
<td>11.58</td>
</tr>
<tr>
<td>Xylene</td>
<td></td>
<td>92.75</td>
<td>12.64</td>
</tr>
<tr>
<td>Urea Resin and Solvents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beckamine 21-511</td>
<td>Reichhold Chemicals, Inc.</td>
<td>161.9</td>
<td>18.96</td>
</tr>
<tr>
<td>Ethyl 3-ethoxy propionate</td>
<td>Eastman Chemical</td>
<td>117.8</td>
<td>14.89</td>
</tr>
<tr>
<td>Xylene</td>
<td>Shell Chemical Co.</td>
<td>121.1</td>
<td>16.70</td>
</tr>
<tr>
<td><strong>Total Formulation</strong></td>
<td></td>
<td>890.2</td>
<td>100.00</td>
</tr>
</tbody>
</table>

### Mixing Instructions

Dissolve the EPON 1007F in the first portions of ethyl-3-ethoxy propionate and xylene. Disperse the pigments in the EPON 1007F solution on a three-roll mill or other suitable dispersing equipment. Let down the grind with the Beckamine 21-511 and the remaining solvents. **NOTE: POOR GLOSS MAY RESULT IF A PORTION OF THE EPON RESIN SOLUTION IS USED IN LETTING DOWN THE DISPERSION.**

### Typical Handling

For spray application, reduce the formulation to a No. 4 Ford Cup viscosity of 20 seconds with ethyl 3-ethoxy propionate/toluene, 1/1 by weight.

This coating system should be baked for 20 minutes at 385 °F.
### Units and Values

<table>
<thead>
<tr>
<th>EPON Resin 1007F/Beckamine 21-511 ratio (solids)</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonvolatile content by weight</td>
<td>%</td>
<td>45.0</td>
</tr>
<tr>
<td>Weight per gallon</td>
<td>lb/gal</td>
<td>8.9</td>
</tr>
<tr>
<td>Pigment : Binder Weight Ratio</td>
<td>%</td>
<td>0.24/1.0</td>
</tr>
<tr>
<td>Pigment volume concentration (PVC)</td>
<td>%</td>
<td>6.6</td>
</tr>
<tr>
<td>Volatile Organic Compound (VOC)</td>
<td>g/L</td>
<td>587</td>
</tr>
</tbody>
</table>

### 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.

### Contact Information

For product prices, availability, or order placement, please contact customer service:

[www.hexion.com/Contacts/](http://www.hexion.com/Contacts/)

For literature and technical assistance, visit our website at [www.hexion.com](http://www.hexion.com)