VRI 777C SOLVENTLESS POLYESTER RESIN

Product Description
VRI 777C Solventless Polyester Resin is a thixotropic semi-rigid resin system designated primarily for vacuum-pressure impregnation of both form wound and random wound motors. Its high thermal capability coupled with its excellent electrical properties over a wide temperature range make this resin system suitable for both AC and DC applications in the higher voltage ranges in both form wound motors and transformers.

Applications
VRI 777 resin is suggested as an impregnant for both form and random wound motors. The retention of its excellent electrical properties over a wide temperature range makes this resin particularly suited for transformer impregnation. Because of its thixotropic nature and good bond strength, VRI 777 resins lend itself to brush winding field coils.

Features
- Improved Film Build
- Improved Bond Strength and Wetting
- Excellent Electrical/Dissipation Factor
- Low Weight Loss (after heat aging)
- Low Volatility/Reduced Odor
- UL 1446 Recognition

Benefits
- Reduces number of VPI cycles
- Provides better mechanical resistance
- Lowers vibration noise
- Withstands severe starting stresses
- Reduces Internal heating
- Provides additional safety margin
- Reduces shrinkage and internal stress
- Virtually no emissions
- Reduces OSHA and EPA concerns
- Class 180

Product Information
Data
Viscosity 77°F @ 25°C 77 2.5 RPM: 4000-5000 cps
(Brookfield-#4 Spindle) 20 RPM: 1000-2000 cps
lbs/gal 8.6-8.8
Gel Time @ 118°C, 1% Dicumyl Peroxide; minutes 15-30
Flash Point (Pensky-Martens) 113°C
Film Build, mils, avg. 4-4.5

Product Characteristics
Electrical Properties
<table>
<thead>
<tr>
<th>Temperature</th>
<th>25°C</th>
<th>100°C</th>
<th>125°C</th>
<th>150°C</th>
<th>180°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissipation Factor ASTM D150, 60 Hz; per cent</td>
<td>0.4</td>
<td>3.3</td>
<td>2.2</td>
<td>0.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Dielectric Constant, ASTM D150, 60Hz</td>
<td>2.0</td>
<td>2.4</td>
<td>2.6</td>
<td>2.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Dielectric Strength, ASTM D115; VPM</td>
<td>2700</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Bond Strength, Helical Coil, MW-35;</td>
<td>41#</td>
<td>17#</td>
<td>11#</td>
<td>9#</td>
<td>5#</td>
</tr>
<tr>
<td>Weight Loss, 1000 hrs @ 392°F (200°C); percent</td>
<td>4.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat Distortion Temperature; °F (°C)</td>
<td>158 (70)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shelf Life
777 resin can be expected to stay within its specified gel time limits when stored pre-catalyzed for up to six months at 77°F (25°C). This may be extended by storing 707A resin in its uncatalyzed state.

Specifications
The properties listed in this data sheet are typical values only and should not be used as a basis for preparing specifications. For more information contact our Customer Service department, (518) 344-7100, or your local authorized distributor of VRI products.
Safety Precautions
Material Safety Data Sheets (MSDS) defining the known hazards and describing appropriate safety precautions with respect to this product are available upon request from Von Roll Isola USA, Inc., One West Campbell Road, Schenectady, New York 12306 (518) 344-7100. Similar information sheets for solvents and other chemicals used with our product may be obtained from the supplier and used accordingly.

Availability
VRI 777 Solventless Polyester Resin is available from Von Roll Isola USA, Inc. or from your local authorized distributor. For the name of your distributor or for more information on this product, contact our Customer Service department, (518) 344-7100.

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