QUALITIES THAT BOND

PRODUCT INFORMATION

ULTIMEG 2000/250

EPOXY-PHENOLIC
IMPREGNATING
FREON RESISTANT
CLASS H (180°C)

ULTIMEG 2000/250 FREON RESISTANT EPOXY IMPREGNATING VARNISH

GENERAL DESCRIPTION

ULTIMEG 2000/250 is a phenolic modified epoxy varnish, which produces tough chemically resistant insulating films with good bond strengths at all operating temperatures up to Class ‘H’ (180°C). The varnish gives excellent penetration into windings with clean drainage and low secondary drainage properties. The cured product has exceptional resistance to chemicals and moisture. The varnish is suitable for use in hermetic and semi-hermetic systems containing Arcton and Freon refrigerants including R21, R22, R23, R32, R125, R134a, R407C, mineral oil and ester oil.

APPLICATION

A speciality product specifically designed for impregnation of hermetic and semi-hermetic pump motors where Freon resistance is essential.

SPECIFICATION:

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISCOSITY</td>
<td>38 - 45 secs BS 3900 pt A6 B4 flow cup at 25°C</td>
</tr>
<tr>
<td>NON VOLATILE CONTENT</td>
<td>38 - 42%</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>0.98 – 1.01</td>
</tr>
<tr>
<td>FLASHPOINT</td>
<td>26°C</td>
</tr>
<tr>
<td>SHELF LIFE</td>
<td>18 months at 20°C</td>
</tr>
</tbody>
</table>

NOTE: Due to the introduction of improvements from time to time the right is reserved to supply products that may differ slightly from those illustrated or described in this publication.

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ULTIMEG 2000/250

PROCESSING

METHOD   -  Cold or hot dip
VISCOSITY -  Cold Dip       Hot Dip
             -As supplied-
REDUCER   -  AEV ULTIMEG 2000/ T4 & T66

WORKSHOP PRACTICE

Varnish in impregnating tanks should be checked for viscosity on a regular basis to ensure consistent impregnation.
A temperature/viscosity graph is available on request.

Solvent loss from the tank can be reduced by keeping the tank lidded when not in use.
Regular additions of fresh varnish to the tank are recommended to maintain stability.

Tank samples will be analysed free of charge by our laboratories.

The cure time chosen for impregnation is dependent on the size and type of component, and the oven efficiency. Typical figures are given.

Windings should be preheated to relieve stresses in wire enamel.

IMPORTANT It is necessary to use an initial low bake of two hours to 100°C to prevent bubbling before curing at the higher temperatures below.

CURE SCHEDULE

<table>
<thead>
<tr>
<th>TIME (hours)</th>
<th>10</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMPERATURE (°C)</td>
<td>150</td>
<td>160</td>
</tr>
</tbody>
</table>
**ULTIMEG 2000/250**

**PROPERTIES OF CURED VARNISH**

<table>
<thead>
<tr>
<th>Property</th>
<th>Temperature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bond Strength</td>
<td>20°C</td>
<td>140 lbs (63.5 kgs)</td>
</tr>
<tr>
<td></td>
<td>155°C</td>
<td>46 lbs (20.9 kgs)</td>
</tr>
<tr>
<td>Breakdown Voltage</td>
<td>20°C</td>
<td>4250 v/mil</td>
</tr>
<tr>
<td></td>
<td>90°C</td>
<td>3820 v/mil</td>
</tr>
<tr>
<td></td>
<td>24 hr immersion in sea water</td>
<td>3500 v/mil</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Pass 6mm (1/4&quot;) mandrel</td>
<td></td>
</tr>
</tbody>
</table>

**HEALTH & SAFETY**
Refer to Material Safety Data Sheet available.

**PACKAGING**
210 ltr, 25 ltr, 5 ltr

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