QUALITIES THAT BOND

PRODUCT INFORMATION

ULTIMEG 2000-642
ANTI TRACKING
AIR DRYING ALKYD
CLEAR, GOLDEN

ULTIMEG 2000-642 ANTI-TRACKING ENAMELS AND VARNISHES

GENERAL DESCRIPTION
Ultimag 2000-642 anti-tracking provides a tough, impervious, insulating seal in difficult environments. The system dries rapidly in thin film to give very effective sealing off of electrical leakage paths together with excellent noise reduction characteristics. The cured product conforms to BS 5629 type 1.1 (IEC 464), has excellent resistance to transformer oils and moisture, and is suitable for use in Class B and F insulating systems.

APPLICATION
Suitable for noise reduction in small transformers and moisture protection and anti-tracking on all types of electrical equipment.

SPECIFICATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity</td>
<td>120-145 secs</td>
<td>BS3900 PTA6 B4 flow cup at 25°C</td>
</tr>
<tr>
<td>Nonvolatile content</td>
<td>38-42%</td>
<td>(Clear &amp; golden versions)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.95-0.98</td>
<td>(Clear &amp; golden versions)</td>
</tr>
<tr>
<td>Flash point</td>
<td>27°C</td>
<td></td>
</tr>
<tr>
<td>Shelf life</td>
<td>12 months at 21°C</td>
<td></td>
</tr>
<tr>
<td>Drying time</td>
<td>Touch dry 15-30 minutes</td>
<td>Hard dry 45-75 minutes</td>
</tr>
<tr>
<td></td>
<td>Full cure 24 hours</td>
<td></td>
</tr>
</tbody>
</table>

PROCESSING

Method
Brush, dip or spray.

Viscosity
Brush As supplied
Dip See workshop practice
Spray Thin with T4 thinner

Reducer
Ultimag 2000 T4 thinner.

WORKSHOP PRACTICE

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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Procedure for dip impregnation of smaller components.

1. Thin Ultimeg 2000-642 with T4 thinners such to achieve a desired film build on components, (graphs are available on request).
2. Immerse the components completely into the varnish for 1-10 minutes.
3. Drain components for 15-30 minutes over the varnish.
4. Cure
   a) At ambient
      45 minutes - 2 hours components can be handled, but only 50-70% of properties have developed and there is still residue solvent to be eliminated.
      24-48 hours 95% of properties are developed and there are only trace quantities of solvent still present within components whereas in the majority of cases this trace of solvent is diffused slowly into the atmosphere causing no further problem, if the components are used or packed in materials such as polystyrene some attack can occur.
   b) The cure can be accelerated heating the components for 2 - 3 hours at 80°C will give an equivalent cure to 24 - 48 hours at ambient.

   With heavily taped, tightly wound or larger components there is a risk of solvent entrapment. Using a heat cure process reduces this risk.

The process each customer chooses depends on component size or design, film required, cure temperature and oven efficiency and thus only a guide can be given.

The cure time’s chosen is dependant on the size and type of component. Typical figures are given.

**CURE TIMES**

<table>
<thead>
<tr>
<th>Time</th>
<th>15-30 mins</th>
<th>45-75 mins</th>
<th>24-48 hrs</th>
<th>2-3 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature (deg C)</td>
<td>21°C</td>
<td>21°C</td>
<td>21°C</td>
<td>80°C</td>
</tr>
<tr>
<td>Comment</td>
<td>Touch dry</td>
<td>Components Cured</td>
<td>Handleable</td>
<td></td>
</tr>
</tbody>
</table>

**PROPERTIES OF CURED VARNISH**

| Breakdown voltage ASTM149 Dry 20°C | 1000v/ml |
| Wet | 320v/ml |
| Comparative tracking index | 185 |
| Flexibility | Pass 5mm (3/16") mandrel |

**CHEMICAL RESISTANCE**

| Hot oil ASTM D115 | unaffected |
| Water | good |
| Acid | good |
Qualities that Bond

Alkali good
Salt water good

HEALTH & SAFETY
Refer to Material Safety Data Sheet available.

PACKAGING
25 ltr, 5 ltr tins clear, golden.

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