### Polymeric Materials - Filament-wound Tubing, Industrial Laminates, Vulcanized Fiber, and Materials for Use in Fabricating Recognized Printed Wiring Boards - Component

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**GOLDENMAX INTERNATIONAL TECHNOLOGY (HANGZHOU) LTD**

No 188 Dakang Rd Lin’an Qingshanlake Subdistrict
Hangzhou, Zhejiang 311305 CHINA

#### Industrial laminates:

<table>
<thead>
<tr>
<th>Mtl Dsg</th>
<th>ANSI Type</th>
<th>Color</th>
<th>Build up</th>
<th>R.T.I.</th>
<th>H</th>
<th>H</th>
<th>Meets 746E Non-HAL</th>
<th>Meets 746E DSR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DL-C3</strong></td>
<td>CEM-3</td>
<td>NC (WT)</td>
<td>0.63</td>
<td>V-0</td>
<td>130</td>
<td>140</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.6</td>
<td>V-0</td>
<td>130</td>
<td>140</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>ILM-R1##</strong></td>
<td>FR-4.0</td>
<td>NC,YL</td>
<td>0.38</td>
<td>V-0</td>
<td>130</td>
<td>130</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.63</td>
<td>V-0</td>
<td>130</td>
<td>140</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.40</td>
<td>V-0</td>
<td>130</td>
<td>140</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>GF11/T600</strong></td>
<td>FR-4.0</td>
<td>NC</td>
<td>0.63</td>
<td>V-0</td>
<td>130</td>
<td>140</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.4</td>
<td>V-0</td>
<td>130</td>
<td>140</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>GF11_T6</strong></td>
<td>No ANSI</td>
<td>NC (YL)</td>
<td>0.63</td>
<td>V-0</td>
<td>90</td>
<td>90</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.40</td>
<td>V-0</td>
<td>90</td>
<td>90</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Metal base industrial laminates:

<table>
<thead>
<tr>
<th>Mtl Dsg</th>
<th>Color</th>
<th>Metal</th>
<th>Dielectric</th>
<th>R.T.I.</th>
<th>H</th>
<th>Meets 746E Non-HAL</th>
<th>Meets 746E DSR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GL12,GL22,GL-P1@</strong></td>
<td>NC</td>
<td>0.3</td>
<td>100</td>
<td>230</td>
<td>V-0</td>
<td>90</td>
<td>90</td>
</tr>
</tbody>
</table>
**Ultrathin build ups:**

<table>
<thead>
<tr>
<th>Build Up</th>
<th>Laminate</th>
<th>Prepreg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mtl Dsg</td>
<td>ANSI Type</td>
<td>Min Thk (mm)</td>
</tr>
<tr>
<td>ILM-U1##</td>
<td>FR-4.0</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.63</td>
</tr>
</tbody>
</table>

Ultrathin industrial laminates and bonding layers, furnished in sheet form, for use in multilayer printed wiring boards where the thickness is built up to the minimum specified.

**Metal clad industrial laminates:**

<table>
<thead>
<tr>
<th>Metal Clad Dsg</th>
<th>Laminate Dsg</th>
<th>Prepreg Dsg</th>
<th>ANSI Type</th>
<th>Bld up</th>
<th>Clad Cond Thk</th>
<th>Max</th>
<th>Max</th>
<th>Solder Lts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Metal clad multilayer package (mass laminate) with internal circuitry and solid copper on outside surfaces, furnished as sheets.

<table>
<thead>
<tr>
<th>ILM-ML1##</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILM-U1##</td>
</tr>
</tbody>
</table>

**Metal clad industrial laminates for use in multilayer printed wiring boards with copper on one or both sides, furnished as sheets.**

<table>
<thead>
<tr>
<th>ILM-U1##</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILM-U1##</td>
</tr>
</tbody>
</table>

**Metal clad industrial laminates for use in single layer printed wiring boards with copper on one or both sides, furnished as sheets.**

<table>
<thead>
<tr>
<th>DL-C3</th>
<th>DL-C3</th>
<th>CEM-3</th>
<th>0.63</th>
<th>17</th>
<th>102</th>
<th>-</th>
<th>12.7</th>
<th>V-0</th>
<th>130</th>
<th>288</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF11/T600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GF11/T600</td>
<td>-</td>
<td></td>
<td>0.63</td>
<td>17</td>
<td>102</td>
<td>-</td>
<td>50.8</td>
<td>V-0</td>
<td>130</td>
<td>288</td>
<td>10</td>
</tr>
<tr>
<td>ILM-R1##</td>
<td>-</td>
<td></td>
<td>FR-4.0</td>
<td>0.38</td>
<td>17</td>
<td>102</td>
<td>-</td>
<td>50.8</td>
<td>V-0</td>
<td>130</td>
<td>288</td>
</tr>
</tbody>
</table>

**Metal clad metal base industrial laminates:**

<table>
<thead>
<tr>
<th>Metal Clad Dsg</th>
<th>Laminate Dsg</th>
<th>Prepreg Dsg</th>
<th>Metal</th>
<th>Dielectric</th>
<th>Clad Cond Thk</th>
<th>Max</th>
<th>Max</th>
<th>Solder Lts</th>
</tr>
</thead>
<tbody>
<tr>
<td>GL12,GL22,GL-P1@</td>
<td>GL12,GL22,GL-P1@</td>
<td>0.3</td>
<td>100</td>
<td>230</td>
<td>18</td>
<td>102</td>
<td>-</td>
<td>50.8</td>
</tr>
</tbody>
</table>

# - May be followed by a suffix.
© - May be shipped as a B-stage insulation sheet without being adhered to a metal substrate. PWB manufacturer must adhere to aluminum metal base as specified above, within thickness range Recognized.
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