PEBAX® RNEW® 30R51 SA 01

Polyether block Pebax® Rnew® 30R51 SA 01 resin is a thermoplastic elastomer made of flexible polyether and rigid polyamide based on renewable resources.

Pebax® Rnew® 30R51 SA 01 resin is an inherently dissipative polymer and can be dry blended or compounded with a polymer matrix to lower the surface resistivity of the final part. This grade is particularly recommended for PMMA matrices. This hydrophilic grade when extruded into either a thin film or laminated on to a substrate offers excellent permeability to moisture vapor while remaining waterproof.

The percentage of renewable carbon according to ASTM D6866 is 41%.

Refractive index according to an internal method is 1.49.

Main applications:
- Permanent antistatic additive for PMMA matrices.
- Breathable membranes.

Note: this grade is not recommended by Arkema for usage in medical applications.

Packaging:
This grade is delivered dried in sealed packaging (25 kg bags) ready to be processed.

Shelf Life:
Two years from the delivery. For any use above this limit, please refer to our technical services.

**MAIN CHARACTERISTICS**

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>DRY / COND</th>
<th>UNIT</th>
<th>TEST STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Modulus</td>
<td>- / 8560</td>
<td>psi</td>
<td>ISO 527-1/2</td>
</tr>
<tr>
<td>Stress at 50% Strain</td>
<td>- / 1020</td>
<td>psi</td>
<td>ISO 527-1/2</td>
</tr>
<tr>
<td>Strain at Break</td>
<td>- / &gt; 50</td>
<td>%</td>
<td>ISO 527-1/2</td>
</tr>
<tr>
<td>Strain at Break TPE</td>
<td>&gt;300 / *</td>
<td>%</td>
<td>ISO 527-1/2</td>
</tr>
<tr>
<td>Stress at Break TPE</td>
<td>2320 / *</td>
<td>psi</td>
<td>ISO 527-1/2</td>
</tr>
<tr>
<td>Shore D Hardness, 15s</td>
<td>30 / *</td>
<td>-</td>
<td>ISO 7619-1</td>
</tr>
<tr>
<td>Melting Temperature, 10°C/min</td>
<td>302 / *</td>
<td>°F</td>
<td>ISO 11357-1/3</td>
</tr>
<tr>
<td>Volume Resistivity</td>
<td>1E8 / 1E8</td>
<td>Ohm*m</td>
<td>IEC 60093</td>
</tr>
<tr>
<td>Surface Resistivity</td>
<td>* / 1E8</td>
<td>Ohm</td>
<td>IEC 60093</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>20 / *</td>
<td>%</td>
<td>Sim. to ISO 62</td>
</tr>
<tr>
<td>Humidity Absorption</td>
<td>2.5 / *</td>
<td>%</td>
<td>Sim. to ISO 62</td>
</tr>
<tr>
<td>Density</td>
<td>1.01 / -</td>
<td>g/cm³</td>
<td>ISO 1183</td>
</tr>
</tbody>
</table>

Processing conditions:
- Typical melt temperature (Min / Recommended / Max): 200°C / 240°C / 270°C.
- Typical mold temperature: 25–60°C.
- Drying time and temperature (only necessary for bags opened for more than two hours): 4-6 hours at 65-75°C.

Processing conditions:
- Typical melt temperature (Min / Recommended / Max): 210°C / 220°C / 230°C.
- Drying time and temperature (only necessary for bags opened for more than two hours): 4-6 hours at 65-75°C.

**Processing**
Injection Molding, Other Extrusion

**Special Characteristics**
Heat Stabilized, Light stabilized or stable to light
PEBAX® RNEW® 30R51 SA 01

Delivery form
Pellets

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa


Pebax® Rnew® is a registered trademark of Arkema
© 2019 Arkema Inc. All rights reserved.

pebax.com