Polyether block amide Pebax® MH 1657 resin is a thermoplastic elastomer made of flexible polyether and rigid polyamide. Pebax® MH 1657 resin is an inherently dissipative polymer and can be dry blended or compounded with an isolative polymer to lower the surface resistivity of the final part. This hydrophilic grade when extruded into either a thin film or laminated on to a substrate also offers excellent permeability to moisture vapor while remaining waterproof.

Main applications:
- Breathable membranes.
- Permanent antistatic additive.

Packaging:
This grade is delivered dried in sealed packaging (25 kg bags and 550 kg rigid containers) 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>13100 / 11600</td>
<td>psi</td>
<td>ISO 527-1/-2</td>
</tr>
<tr>
<td>Stress at 50% Strain</td>
<td>1890 / 1740</td>
<td>psi</td>
<td>ISO 527-1/-2</td>
</tr>
<tr>
<td>Strain at Break</td>
<td>&gt; 50 / &gt; 50</td>
<td>%</td>
<td>ISO 527-1/-2</td>
</tr>
<tr>
<td>Charpy Impact Strength, +23°C</td>
<td>N / N</td>
<td>ft/lb/in²</td>
<td>ISO 179/1eU</td>
</tr>
<tr>
<td>Charpy Impact Strength, -30°C</td>
<td>N / N</td>
<td>ft/lb/in²</td>
<td>ISO 179/1eU</td>
</tr>
<tr>
<td>Charpy Notched Impact Strength, +23°C</td>
<td>N / N</td>
<td>ft/lb/in²</td>
<td>ISO 179/1eA</td>
</tr>
<tr>
<td>Melting temperature, 10°C/min</td>
<td>399 / *</td>
<td>°F</td>
<td>ISO 11357-1/-3</td>
</tr>
<tr>
<td>Glass transition temperature, 10°C/min</td>
<td>-40 / *</td>
<td>°F</td>
<td>ISO 11357-1/-2</td>
</tr>
<tr>
<td>Volume resistivity</td>
<td>- / 2E7</td>
<td>Ohm·m</td>
<td>IEC 60093</td>
</tr>
<tr>
<td>Surface resistivity</td>
<td>* / 1.5E9</td>
<td>Ohm</td>
<td>IEC 60093</td>
</tr>
<tr>
<td>Water absorption</td>
<td>120 / *</td>
<td>%</td>
<td>Sim. to ISO 62</td>
</tr>
<tr>
<td>Humidity absorption</td>
<td>4.5 / *</td>
<td>%</td>
<td>Sim. to ISO 62</td>
</tr>
<tr>
<td>Density</td>
<td>1.14 / -</td>
<td>g/cm³</td>
<td>ISO 1183</td>
</tr>
<tr>
<td>Injection Molding, melt temperature</td>
<td>464 / °F</td>
<td>°F</td>
<td>ISO 294</td>
</tr>
<tr>
<td>Injection Molding, mold temperature</td>
<td>86 / °F</td>
<td>°F</td>
<td>ISO 10724</td>
</tr>
</tbody>
</table>

Processing conditions:
- Typical melt temperature (Min / Recommended / Max): 230°C / 240°C / 260°C.
- Typical mold temperature: 25–60°C.
- Drying time and temperature (only necessary for bags/containers opened for more than two hours): 5-7 hours at 70-90°C.

Processing conditions:
- Typical melt temperature (Min / Recommended / Max): 230°C / 250°C / 280°C.
- Drying time and temperature (only necessary for bags/containers opened for more than two hours): 5-7 hours at 70-90°C.
PEBAX® MH 1657

Processing
Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion, Transfer Molding, Casting, Thermoforming

Delivery form
Pellets

Special Characteristics
Increased electrical conductivity, Anti-static, Heat stabilized or stable to heat

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

Chemical Media Resistance

Acids
✓ Sulfuric Acid (38% by mass) (23°C)

Bases
✓ Sodium Hydroxide solution (1% by mass) (23°C)

Hydrocarbons
✓ iso-Octane (23°C)

Salt solutions
✓ Zinc Chloride solution (50% by mass) (23°C)

Other
✓ Water (23°C)


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