PRODUCT DESCRIPTION

TECHNOMELT PA 641 (e) provides the following product characteristics:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Polyamide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber</td>
</tr>
<tr>
<td>Typical Applications</td>
<td>Molding compound thermoplastic</td>
</tr>
<tr>
<td>Flammability Rating</td>
<td>UL 94 V0 @ 0.9 to 1.2 mm thickness</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40 to +125 °C</td>
</tr>
</tbody>
</table>

TECHNOMELT PA 641 (e) high performance thermoplastic polyamide is designed to meet low pressure molding process requirements. This product can be processed at low processing pressure due to its low viscosity, allowing encapsulation of fragile components without damage. This material produces no toxic fumes in process and provides a good balance of low and high temperature performance. TECHNOMELT PA 641 (e) is particularly useful in applications which require increased strength and hardness.

LIQUID-STATE TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity @ 225 °C, mPa·s (cP)</td>
<td>4,500</td>
</tr>
<tr>
<td>Specific Gravity @ 25 °C</td>
<td>0.98</td>
</tr>
<tr>
<td>Softening Point, °C</td>
<td>170 to 180</td>
</tr>
</tbody>
</table>

TYPICAL PROCESS DATA

Handling:
Molding Temperature, °C 210 to 240

TECHNOMELT PA 641 (e) has been formulated to provide the best possible moldability and as wide a molding latitude as possible. Much of the final molding parameters will be determined by the mold design. Although molding and curing conditions will vary from situation to situation, recommended starting ranges are shown above.

SOLID-STATE PROPERTIES

Physical Properties
Shore Hardness, Shore A 92
Elongation , at break,% 800

Electrical Properties
Dielectric Constant / Dissipation Factor, IEC 60250:
1MHz 3.4 / 0.061
1.8 GHz 2.8 / 0.013
Dielectric Strength, kV/mm 25
Volume Resistivity, ohms-cm 3.2×10¹²

TYPICAL PERFORMANCE OF SOLID-STATE MATERIAL

Lap Shear Strength , ISO 4587:

<table>
<thead>
<tr>
<th>Material</th>
<th>N/mm² (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>380 (55,100)</td>
</tr>
<tr>
<td>FR4</td>
<td>1,340 (194,300)</td>
</tr>
</tbody>
</table>

PERFORMANCE AND RELIABILITY DATA

Surface Insulation Resistance (SIR) Testing Pass
IPC-TM-650

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

Not for product specifications
The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage
Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
N x 0.225 = lb
N/mm x 5.71 = lb/in
psi x 145 = N/mm²
MPa = N/mm²
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Disclaimer
Note:
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Reference 0.4