TECHNOMELT

Technical Data Sheet

TECHNOMELT PA 673 (e)

(Electronics) June 2016

PRODUCT DESCRIPTION

TECHNOMELT PA 673 (e) provides the following product characteristics:

Technology	Polyamide
Appearance	Amber
Product Benefits	• Easy moldability • Good adhesion to a variety of substrates • Excellent moisture resistance • Excellent environmental resistance • Simplified process flow
Application	Molding compound thermoplastic
Typical Applications	Encapsulation
Operating Temperature	-40 to +140 °C

TECHNOMELT PA 673 (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.

TECHNOMELT PA 673 (e) can be used in automotive underhood applications where high service temperature performance is critical. This material produces no toxic fumes in process and provides a good balance of low and high temperature performance.

LIQUID-STATE TYPICAL PROPERTIES

Viscosity @ 210 °C, mPa·s (cP)	3,400
Specific Gravity @ 25 °C	0.98
Softening Point, °C	182 to 192

TYPICAL PROCESS DATA

Handling:

Molding Temperature, °C	210 to 240

TECHNOMELT PA 673 (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	88
Elongation , at break,%	400

Electrical Properties

Dielectric Constant / Dissipation Factor, IEC 60250:	
1MHz	3.7 / 0.084
1 GHz	2.7 / 0.032
1.8 GHz	2.9 / 0.047
Dielectric Strength, kV/mm	20
Volume Resistivity, ohms-cm	1.9×10^{12}
Comparative Tracking Index @ 300 mm, IEC 60112, volts	600

TYPICAL PERFORMANCE OF SOLID-STATE MATERIAL

Shear Strength

Lap Shear Strength , ISO 4587:

Steel	N/mm² (psi)	147 (21,315)
FR4	N/mm² (psi)	980 (142,100)

PERFORMANCE AND RELIABILITY DATA

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

GENERAL INFORMATION

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

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.

TECHNOMELT PA 673 (e) will absorb moisture from the air. Material from opened containers should be transferred immediately into air tight containers. Material should be stored in sealed containers in a cool dry location in order to maximize shelf life.

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.

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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:
The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.
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Reference N/A