OM633™

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PRODUCT DESCRIPTION

Macromelt®OM633™ 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 application	Encapsulation
Flammability	94 V-0
Operating Temperature	-40 to +125 °C

OM633™ 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. OM633™ is suitable for automotive firewall applications where 125°C service temperatures are required.

OM633™ meets UL 94 V-0 Flammability at 3.175mm thickness.

LIQUID-STATE TYPICAL PROPERTIES

Viscosity @ 210 °C, mPa·s (cP)	3,500
Specific Gravity @ 25 °C	0.98
Shelf Life @ 25°C, years	2
Softening Point, °C	170 to 180
Flash Point - See MSDS	

TYPICAL PROCESS DATA

Handling:

Molding Temperature, °C	200 to 240
Typical Cycle Time, seconds	30 to 75

OM633™ 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:

Coefficient of Thermal Expansion , ppm/°C:	
Above Tg	224
Glass Transition Temperature, °C	-36
Shore Hardness, Shore A	90
Elongation , at break,%	400

Electrical Properties:

Dielectric Constant / Dissipation Factor, IEC 60250:	
1MHz	3.8 / 0.086
1 GHz	2.8 / 0.026
1.8 GHz	2.6 / 0.021
Dielectric Strength, kV/mm	24
Volume Resistivity, ohms-cm	1.7×10^{13}

TYPICAL PERFORMANCE OF SOLID-STATE MATERIAL

Lap Shear Strength :

Steel	N/mm² (psi)	451 (65,395)
FR4	N/mm² (psi)	1,440 (208,800)

PERFORMANCE AND RELIABILITY DATA

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

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.

Macromelt®OM633™ 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.

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
N/mm² x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·m x 0.738 = lb·ft
N·mm x 0.142 = oz·in
mPa·s = cP

Note
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