

# Technical Information

Macromelt OM 646

Type of Product: Polyamide hot melt  
Field of application: Macromelt molding  
Application system: Application systems for hotmelt adhesives

## Material properties:

Colour:	black	
Density:	0.98 g/cm <sup>3</sup>	DIN 53479 (Method B, 20°C)
Softening point:	175 °C	ASTM E 28 (in siliconoil)
Melting viscosity:	210 °C 6500 mPa.s 220 °C 4500 mPa.s 230 °C 3000 mPa.s	ASTM D 3236 (RVT, spindle 27)
Shore A-hardness:	92	DIN 53505
Low temperature flexibility:	- 40 °C	ASTM D 3111
Yield strength:	5,0 N/mm <sup>2</sup>	DIN 53455
Break strength:	9,0 N/mm <sup>2</sup>	Specimen no. 4 cross-head-speed: 50mm/min
Elongation:	700 %	
Temperature creep-resistance:	155 °C	Henkel-method MH 11
Glass transition:	-35 °C	DSC 2.Lauf
Dielectric strength:	22 kV/mm	VDE 0303 part 2
Volume resistivity:	1.7 x 10 <sup>12</sup> Ωxcm	VDE 0303 part 3
Dielectric properties:	5.5 (1kHz)	VDE 0303 part 4
Working temperature:	-40 °C to 125 °C shortly 150 °C	depends on the application
Application temperature:	200 - 240 °C	

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<u>Handling:</u> <u>suggestions:</u>	When substrates with high heat conductivity shall be bonded the use of a given application temperature is necessary for good wetting. The substrate surface should be free of dust and cleaned with a suitable solvent so that there is no fat and oil. Don't heat the product over the mentioned application temperature range. Without using don't heat the product for a long time, because the quality can decrease or extremely the product cokes. The standby temperature is 130 °C. Macromelt OM 646 may adsorb moisture from the air. This will not be obvious in the solid form, but could cause foaming as the adhesive is melted which may result in poor bonds. Reclose the container tightly as soon as sufficient adhesive has been removed for immediate use.
<u>Apparatus</u> <u>cleaning:</u>	Remove very strong coked and not thermoplastic rests of hot melt mechanical. We recommend a solvent free cleaning agent for the hot application apparatus like Macromelt XS 0062 (see separate technical information).
<u>Safety-</u> <u>precautions:</u>	No health hazards are expected when Macromelt OM 646 is in solid form. However, once melted it is like any hot liquid, which can produce severe burns. The appropriate safety precautions should be used (see also safety-data-sheet). If the molten adhesive has contacted your skin, cool the affected area immediately with cold water. Do not try to remove the adhesive from the skin. Go to your first aid station for attention.
<u>Regulations:</u>	On the base of the available data, the product is not a hazardous material according to the German chemical law or the hazardous substances regulations dated 26.08.1986 (incl. the 1. modification dated 16.12.1987).
<u>Disposal:</u>	080404 (EAK code)
<u>Form of supply:</u>	Granulate, multi-wall paper sacks inside with aluminium foil containing 20 kg net.
<u>Storage:</u>	Up to max. +35 °C, min. 24 months in original closed container. Be sure that used container are closed immediately with insulation against moisture. Maybe the adhesive and application properties can decrease by storing with open containers.

Information provided herein is based upon our practical knowledge and experience. Due to different materials used as well as to varying working conditions which are beyond our control we strictly recommend to carry out intensive trials. Any warranty and/or liability shall not be based on above information or personal consultation, except the contents of a consultation is explicitly confirmed by us in writing.

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