

TECHNOMELT PA 646 BLACK

Known as Macromelt OM 646
February 2013

PRODUCT DESCRIPTION

TECHNOMELT PA 646 BLACK provides the following product characteristics:

Technology	Polyamide
Product Type	Hotmelt
Cure	Physical setting
Condition	Thermoplastic
Components	One-component
Application	Molding
Color	Black

Application Areas

TECHNOMELT PA 646 BLACK is used for molding applications.

TECHNICAL DATA

Technomelt PA 646 BLACK:

Density, g/cm ³ ISO 1183-1, 20°C	0.98
Softening point, °C ASTM E28 (in glycerine)	170 to 180
Melting Viscosity at 210 °C, mPas	6,500
Melting Viscosity at 220 °C, mPas	4,500
Melting Viscosity at 225 °C, mPas	3,000 to 5,500
Melting Viscosity at 230 °C, mPas ASTM D 3236 (RVT, spindle 27)	3,000
Shore A hardness ISO 868/15s	92
Yield Strength, N/mm ² ISO 527 Specimen no.5 Cross-head-speed: 50mm/min	5.0
Break Strength, N/mm ² ISO 527 Specimen no.5 Cross-head-speed: 50mm/min	9.0
Elongation, % ISO 527, Specimen no.5 Cross-head-speed: 50mm/min	650
Temperature creep resistance, °C Henkel method MH 11	155
Low temperature flexibility, °C ASTM D 3111	-35
Glass Transition, °C DSC, 2. Run	-30
Flammability UL 94	V-0
Working Temperature, °C Depends on the application, without mechanical stress	-40 to 130

DIRECTIONS FOR USE

Preliminary Statement:

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Preparation:

The surfaces of the substrate must be dry and free from oil, grease and dust.

Application:

Application Temperature : 200 to 240 °C
Application System : Hotmelt application systems

When bonding to a substrate with high thermal conductivity the use of a specific application temperature is required for good wetting.

Do not heat the product above the specified application temperature range.

When the product is not in use do not apply heat, this will degrade the quality of the product and in extreme cases cause carbonisation. The standby temperature for the product is 130°C, but not longer than 72 hours.

TECHNOMELT PA 646 BLACK may absorb moisture from the air. This will not be apparent in the solid form, but may cause bubbles on heating and could affect the bond quality. It is important, therefore, that containers are kept closed and sealed when not in use.

Cleaning:

Carbonised and set (non thermoplastic) material must be removed mechanically. Removal of the thermoplastic material from the hot apparatus can be achieved with solvent free cleaning system, such as Technomelt PA 62 (see separate technical information)

Classification:

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazardous Information
Transport Regulations
Safety Regulations

Storage:

When properly stored in a cool, dry location, with the container tightly closed when not in use, this product will have a shelf life of at least 24 months.



ADDITIONAL INFORMATION

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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