

TECHNOMELT PA 653

Known as Macromelt OM 653
February 2013

PRODUCT DESCRIPTION

TECHNOMELT PA 653 provides the following product characteristics:

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

Application Areas

TECHNOMELT PA 653 is used for molding applications.

TECHNICAL DATA

Technomelt PA 653:

Density, g/cm ³ ISO 1183-1, 20°C	0.98
Softening point, °C ASTM E28 (in glycerine)	160
Melting Viscosity at 200 °C, mPas	6,000
Melting Viscosity at 210 °C, mPas	4,500
Melting Viscosity at 220 °C, mPas	3,400
Melting Viscosity at 230 °C, mPas ASTM D 3236 (RVT, spindle 27)	2,500
Shore A hardness ISO 868/15s	77
Yield Strength, N/mm ² ISO 527 Specimen no.5 Cross-head-speed: 50mm/min	2.8
Break Strength, N/mm ² ISO 527 Specimen no.5 Cross-head-speed: 50mm/min	3.2
Elongation, % ISO 527, Specimen no.5 Cross-head-speed: 50mm/min	400
Temperature creep resistance, °C Henkel method MH 11	125
Low temperature flexibility, °C ASTM D 3111	-50
Glass Transition, °C DSC, 2. Run	-45
Working Temperature, °C Depends on the application, without mechanical stress	-40 to 100

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 : 180 to 230 °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.

TECHNOMELT PA 653 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 12 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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