

TECHNOMELT PA 658 (e)

(Electronics) June 2016

PRODUCT DESCRIPTION

TECHNOMELT PA 658 (e) provides the following product characteristics:

Technology	Polyamide
Appearance	Black
Product Benefits	<ul style="list-style-type: none"> • Easy moldability • Good adhesion to a variety of substrates • Improved hydrolytic stability
Cure	Physical setting
Application	Molding compound thermoplastic
Typical Applications	Encapsulation
Operating Temperature	-40 to +100 °C

TECHNOMELT PA 658 (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. This material produces no toxic fumes in process and provides a good balance of low and high temperature performance. TECHNOMELT PA 658 (e) is well-suited to applications where excellent adhesion and cold temperature flexibility are demanded.

LIQUID-STATE TYPICAL PROPERTIES

Viscosity, Brookfield - RVT, Spindle 27, mPa·s (cP):	
@ 210 °C	4,000
Specific Gravity, g/cm ³	0.97
Softening Point, °C	150 to 165

SOLID-STATE PROPERTIES

Physical Properties

Shore Hardness, Shore A	77
Elongation, %	400
Tensile Yield	N/mm ² 2.8 (psi) (406)
Tensile Break	N/mm ² 3.2 (psi) (464)
Modulus (2%)	N/mm ² 27 (psi) (3,916)
Cold Flex Temperature, °C	-50

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.

Application:

Application Temperature: 210 to 230°C

Application System: Hotmelt application system with gear pump

- 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.
- The substrate surface should be free of dust and cleaned with a suitable solvent so that there is no fat and oil.
- When the product is not in use do not apply heat, this will degrade the quality of the product and in extreme cases cause carbonization. TECHNOMELT PA 658 (e) 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.
- The standby temperature for this material is approximately 50°C.

Cleaning:

Carbonized 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 0062 (see separate technical information).

Packaging

This product comes granulated, packaged in multi-wall bags containing 40 pounds net.

Storage:

Store in a cool, dry location, with the container tightly closed. When not in used, this product will have a shelf life of at least 365 days at temperatures up to +35°C.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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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