

## TECHNOMELT® PA 6839 N BLACK

April 2024

### PRODUCT DESCRIPTION

TECHNOMELT® PA 6839 N BLACK provides the following product characteristics:

<b>Technology</b>	Polyamide
<b>Chemical Type</b>	Hot melt adhesive
<b>Cure</b>	Black granules
<b>Appearance</b>	Physical setting
<b>Components</b>	One-component
<b>Viscosity</b>	Low
<b>Application</b>	Molding
<b>Molding temperature</b>	210°C to 230°C (410°F to 446°F)
<b>Operating temperature range</b>	-20°C to 140°C (-68°F to 284°F)
<b>Specific benefits</b>	<ul style="list-style-type: none"><li>• Easy moldability</li><li>• Designed for molding compound applications</li></ul>

TECHNOMELT® PA 6839 N BLACK is a one-component industrial grade thermoplastic polyamide hot melt adhesive designed to meet low pressure molding process requirements.

TECHNOMELT® PA 6839 N BLACK has been tested to UL 94 V-2. Contact Henkel for details.

### Typical properties

Specific gravity, g/cm <sup>3</sup> ASTM D 1963	0.97
Softening point, °C JIS K 2207, ASTM E28	195
Melting viscosity-brookfield thermosel, mPa·s	
@210°C	6,400
@220°C	4,500
@230°C	3,450

### Typical performance

#### Physical

Shore hardness, Durometer A ISO 868/15s	98
Shore Hardness, Durometer D ISO 868/15s	53
Elongation, % ASTM D1708 Cross-head-speed: 50mm/min	550
E-Modulus, N/mm <sup>2</sup> (psi) ASTM D 638	27,557 (27,557)
Low temperature flexibility, °C ASTM D 3111	-35
Temperature creep resistance, °C Henkel Method MH 11	170
Thermal conductivity, W/m·K ISO 22007-2, 22°C	0.2
Tg glass transition temperature, °C DSC Second run	-45
Water absorption, %, 1 day, 23°C	0.45

#### Strength

Tensile at break, N/mm <sup>2</sup> (psi) ISO 527, Specimen no.5 Cross-head-speed: 50mm/min	14.0 (2030)
Yield strength, N/mm <sup>2</sup> (psi) ISO 527, Specimen no.5 Cross-head-speed: 50mm/min	11.0 (1595)

#### Electrical properties

Volume resistivity, ohms ASTM D 257	4.0 x 10 <sup>11</sup>
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#### General information

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet.



**Direction for use**

1. Use gloves to minimize skin contact. DO NOT use solvents for cleaning hands.
2. The surfaces of the substrate must be dry and free from oil, grease, and dust.
3. Material has been formulated to provide the best possible moldability and as wide a molding latitude as possible.
4. Much of the final molding parameters will be determined by the mold design.
5. Molding temperature will vary from situation to situation, range shown on this data sheet is a starting range for process development.
6. When potting to a substrate with high thermal conductivity the use of a specific application temperature is required for good wetting.
7. Do not heat the product above the specified application temperature range.
8. 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 or charring.
9. Carbonized material must be removed mechanically.
10. 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). Check for availability in your region.

**Storage**

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage: Up to 28°C. Storage above 35°C can adversely affect the ability to handle and dispense the material.**

Material will 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. Material from opened containers should be transferred immediately into airtight containers. Material should be stored in sealed containers in a cool location 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 Henkel representative.

**Product Specification**

The technical data contained herein are intended as reference only and are not considered specifications for the product.

Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

**Approval and Certificate**

Please contact Henkel representative for related approval or certificate of this product.

**Data Ranges**

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

**Conversions**

(°C x 1.8) + 32 = °F  
 kV/mm x 25.4 = V/mil  
 mm / 25.4 = inches  
 μm / 25.4 = mil  
 N x 0.225 = lb  
 N/mm x 5.71 = lb/in  
 N/mm<sup>2</sup> 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

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