

# TECHNOMELT PA 6208 N BLACK

October 2019

## PRODUCT DESCRIPTION

TECHNOMELT PA 6208 N BLACK provides the following product characteristics:

|                             |  |
|-----------------------------|--|
| <b>Technology</b>           | Polyamide  |
| <b>Appearance</b>           | Black  |
| <b>Product Benefits</b>     | <ul style="list-style-type: none"> <li>• Easy moldability</li> <li>• Good adhesion to a variety of substrates</li> <li>• Excellent moisture resistance</li> <li>• Excellent environmental resistance</li> <li>• Simplified process flow</li> </ul> |
| <b>Application</b>          | Molding compound thermoplastic   |
| <b>Typical Applications</b> | Encapsulation  |
| <b>Flammability Rating</b>  | UL 94 V-2  |

TECHNOMELT PA 6208 N BLACK 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 6208 N BLACK exhibits great flexibility in applications requiring strain relief and is ideal for encapsulation of heat-producing components.

TECHNOMELT PA 6208 N BLACK meets UL 94 V-2 Flammability at 3.175mm thickness.

## LIQUID-STATE TYPICAL PROPERTIES

|   |            |
|---|------------|
| Viscosity @ 210 °C, mPa·s (cP)                          | 3,600      |
| Specific Gravity @ 25 °C                                | 0.98       |
| Shelf Life @ 25°C, years                                | 2          |
| Softening Point, °C                                     | 150 to 160 |
| Flash Point - See SDS                                   |            |
| <b>Physical Properties :</b>                            |            |
| Temperature creep resistance, °C<br>Henkel Method MH 11 | 130        |

## TYPICAL PROCESS DATA

### Handling:

|                             |            |
|-----------------------------|------------|
| Molding Temperature, °C     | 190 to 230 |
| Typical Cycle Time, seconds | 30 to 75   |

TECHNOMELT PA 6208 N BLACK has been formulated to provide the best possible moldability and as wide a molding latitude as possible. Much of the final molding parameters will be determined by the mold design. Although molding and curing conditions will vary from situation to situation, recommended starting ranges are shown above.

## SOLID-STATE PROPERTIES

### Physical Properties :

|                                  |      |
|----------------------------------|------|
| Thermal Conductivity, W/(m·K)    | 0.15 |
| Glass Transition Temperature, °C | -42  |
| Shore Hardness, Shore A          | 78   |
| Elongation, at break, %          | 450  |

### Electrical Properties:

|  |                      |
|--|----------------------|
| Dielectric Constant / Dissipation Factor, IEC 60250: |                      |
| 1MHz   | 3.7 / 0.084          |
| 1 GHz  | 2.7 / 0.27           |
| 1.8 GHz  | 2.8 / 0.028          |
| Dielectric Strength, kV/mm                           | 23                   |
| Volume Resistivity, ohms-cm                          | 1.6×10 <sup>11</sup> |

## TYPICAL PERFORMANCE OF CURED MATERIAL

### Performance

|   |     |
|---|-----|
| Yield Strength, N/mm <sup>2</sup><br>ISO 527, Specimen no. 5<br>Cross-head-speed: 50 mm/min | 3.3 |
| Break Strength, N/mm <sup>2</sup><br>ISO 527, Specimen no. 5<br>Cross-head-speed: 50 mm/min | 3.6 |

## 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.

**STORAGE:**

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

TECHNOMELT PA 6208 N BLACK will absorb moisture from the air. Material from opened containers should be transferred immediately into air tight containers. Material should be stored in sealed containers in a cool dry location in order 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 Technical Service Center or Customer Service Representative.

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$

$\text{kV/mm} \times 25.4 = \text{V/mil}$

$\text{mm} / 25.4 = \text{inches}$

$\text{N} \times 0.225 = \text{lb/F}$

$\text{N/mm} \times 5.71 = \text{lb/in}$

$\text{psi} \times 145 = \text{N/mm}^2$

$\text{MPa} = \text{N/mm}^2$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$

$\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$

$\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$

$\text{mPa}\cdot\text{s} = \text{cP}$

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