

## Technical Data Sheet

### Vitamide BR3XNT 6509



Polyamide 6

#### Product Description

Vitamide BR3XNT 6509 is a Polyamide 6 Glass Fiber, 50% filled material and is typically used in Injection Molding applications. Features include: Heat Stabilized.

|                      |                   |
|----------------------|-------------------|
| Processing Method    | Injection Molding |
| Attribute            | Heat Stabilized   |
| Additive             | Heat Stabilizer   |
| Application          | Handles           |
| Filler/Reinforcement | Glass Fiber, 50%  |

| Typical Properties                                      | Nominal Value       | Units             | Test Method    |
|---------------------------------------------------------|---------------------|-------------------|----------------|
| <b>Physical</b>                                         |                     |                   |                |
| Density                                                 | 1.56                | g/cm <sup>3</sup> | ISO 1183       |
| <b>Mechanical</b>                                       |                     |                   |                |
| Tensile Stress at Yield                                 | 225                 | MPa               | ISO 527-2      |
| Tensile Strain at Break                                 | 3                   | %                 | ISO 527-2      |
| Flexural Modulus                                        | 12000               | MPa               | ISO 178        |
| Flexural Stress                                         | 290                 | MPa               | ISO 178        |
| <b>Impact</b>                                           |                     |                   |                |
| Notched Izod Impact Strength                            | 16                  | kJ/m <sup>2</sup> | ISO 180        |
| <b>Thermal</b>                                          |                     |                   |                |
| Deflection Temperature Under Load Unannealed (0.45 MPa) | 220                 | °C                | ISO 75-2/B     |
| Deflection Temperature Under Load Unannealed (1.80 MPa) | 215                 | °C                | ISO 75-2/A     |
| DSC Melting Point                                       | 222                 | °C                | ISO 3146       |
| <b>Electrical</b>                                       |                     |                   |                |
| Dielectric Strength, (2.00 mm)                          | 22                  | kV/mm             | IEC 60243-1    |
| Comparative Tracking Index (CTI), (Solution A)          | 550                 | V                 | IEC 60112      |
| Surface Resistivity                                     | 10000000000<br>0000 | ohm               | IEC 60093      |
| <b>Flammable</b>                                        |                     |                   |                |
| Burning Rate                                            |                     |                   |                |
| (2.00 mm)                                               | <100                | mm/min            | FMVSS 302      |
| (2.00 mm)                                               | <100                | mm/min            | ISO 3795       |
| Glow Wire Ignition Temperature                          | 650                 | °C                | IEC 60695-2-13 |
| <b>UL Information</b>                                   |                     |                   |                |
| Flame Rating                                            | HB                  |                   | UL 94          |

| Injection Parameters   | Nominal Value | Units |
|------------------------|---------------|-------|
| Drying Time            | 3.0 to 4.0    | hr    |
| Drying Temperature     | 80            | °C    |
| Processing (Melt) Temp | 250 to 280    | °C    |
| Mold Temperature       | 60 to 100     | °C    |