

## Technical Data Sheet

**Vitamide BR13BK 1604/1**

Polyamide 6

**Product Description**

*Vitamide* BR13BK 1604/1 is a Polyamide 6 Glass Fiber, 15% filled material and is typically used in Injection Molding applications.

|                             |                         |
|-----------------------------|-------------------------|
| <b>Processing Method</b>    | Injection Molding       |
| <b>Application</b>          | Automotive Applications |
| <b>Filler/Reinforcement</b> | Glass Fiber, 15%        |

| <b>Typical Properties</b>                               | <b>Nominal Value</b> | <b>Units</b>      | <b>Test Method</b> |
|---|----------------------|-------------------|--------------------|
| <b>Physical</b>   |                      |                   |                    |
| Density   | 1.25                 | g/cm <sup>3</sup> | ISO 1183           |
| <b>Mechanical</b>                                       |                      |                   |                    |
| Tensile Stress at Yield                                 | 125                  | MPa               | ISO 527-2          |
| Tensile Strain at Break                                 | 3                    | %                 | ISO 527-2          |
| Flexural Modulus  | 5000                 | MPa               | ISO 178            |
| Flexural Stress   | 170                  | MPa               | ISO 178            |
| <b>Impact</b>   |                      |                   |                    |
| Notched Izod Impact Strength                            | 7                    | kJ/m <sup>2</sup> | ISO 180            |
| <b>Thermal</b>  |                      |                   |                    |
| Deflection Temperature Under Load Unannealed (0.45 MPa) | >200                 | °C                | ISO 75-2/B         |
| Deflection Temperature Under Load Unannealed (1.80 MPa) | 190                  | °C                | ISO 75-2/A         |
| DSC Melting Point                                       | 221                  | °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                                     | 1000000000<br>0000   | ohm               | IEC 60093          |
| <b>Flammable</b>  |                      |                   |                    |
| Burning Rate  |                      |                   |                    |
| (2.00 mm)   | 80                   | mm/min            | FMVSS 302          |
| (2.00 mm)   | 80                   | mm/min            | ISO 3795           |
| Glow Wire Ignition Temperature                          | 650                  | °C                | IEC 60695-2-13     |
| <b>UL Information</b>                                   |                      |                   |                    |
| Flame Rating  | HB                   |                   | UL 94              |
| <b>Injection Parameters</b>                             |                      |                   |                    |
| 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                |                    |