

## Technical Data Sheet

### Vitamide AR13N 2021/1

Polyamide 66

#### Product Description

Vitamide AR13N 2021/1 is a Polyamide 66 Glass Fiber, 15% filled material and is typically used in Injection Molding applications.

|                      |                   |
|----------------------|-------------------|
| Processing Method    | Injection Molding |
| Application          | Housings          |
| Filler/Reinforcement | Glass Fiber, 15%  |

| Typical Properties                                      | Nominal Value        | Units             | Test Method |
|---------------------------------------------------------|----------------------|-------------------|-------------|
| <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                                 | 4                    | %                 | ISO 527-2   |
| Flexural Modulus                                        | 5000                 | MPa               | ISO 178     |
| Flexural Stress                                         | 175                  | MPa               | ISO 178     |
| <b>Impact</b>                                           |                      |                   |             |
| Notched Izod Impact Strength                            | 6                    | 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) | >210                 | °C                | ISO 75-2/A  |
| DSC Melting Point                                       | 255                  | °C                | ISO 3146    |
| <b>Electrical</b>                                       |                      |                   |             |
| Dielectric Strength, (2.00 mm)                          | 34                   | kV/mm             | IEC 60243-1 |
| Comparative Tracking Index (CTI), (Solution A)          | >600                 | V                 | IEC 60112   |
| Surface Resistivity                                     | 10000000000<br>00000 | ohm               | IEC 60093   |
| <b>Flammable</b>                                        |                      |                   |             |
| Burning Rate                                            |                      |                   |             |
| (2.00 mm)                                               | <100                 | mm/min            | ISO 3795    |
| (2.00 mm)                                               | <100                 | mm/min            | FMVSS 302   |
| <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 | 280 to 300    | °C    |
| Mold Temperature       | 60 to 120     | °C    |