

## Technical Data Sheet

### *Vitamide* AR17N M1 NATURAL



Polyamide 66

#### Product Description

*Vitamide* AR17N M1 NATURAL is a Polyamide 66 Glass Fiber, 33% filled material and is typically used in Injection Molding applications.

**Processing Method** Injection Molding

**Filler/Reinforcement** Glass Fiber, 33%

| Typical Properties                                      | Nominal Value       | Units             | Test Method    |
|---------------------------------------------------------|---------------------|-------------------|----------------|
| <b>Physical</b>                                         |                     |                   |                |
| Density                                                 | 1.4                 | g/cm <sup>3</sup> | ISO 1183       |
| <b>Mechanical</b>                                       |                     |                   |                |
| Tensile Stress at Yield                                 | 195                 | MPa               | ISO 527-2      |
| Tensile Strain at Break                                 | 3.5                 | %                 | ISO 527-2      |
| Flexural Modulus                                        | 10000               | MPa               | ISO 178        |
| Flexural Stress                                         | 270                 | MPa               | ISO 178        |
| <b>Impact</b>                                           |                     |                   |                |
| Notched Izod Impact Strength                            | 14                  | kJ/m <sup>2</sup> | ISO 180        |
| <b>Thermal</b>                                          |                     |                   |                |
| Deflection Temperature Under Load Unannealed (0.45 MPa) | 260                 | °C                | ISO 75-2/B     |
| Deflection Temperature Under Load Unannealed (1.80 MPa) | 255                 | °C                | ISO 75-2/A     |
| DSC Melting Point                                       | 260                 | °C                | ISO 3146       |
| <b>Electrical</b>                                       |                     |                   |                |
| Dielectric Strength, (2.00 mm)                          | 34                  | kV/mm             | IEC 60243-1    |
| Comparative Tracking Index (CTI), (Solution A)          | 450                 | V                 | IEC 60112      |
| Surface Resistivity                                     | 1000000000<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      |
| Glow Wire Ignition Temperature                          | 650                 | °C                | IEC 60695-2-13 |
| <b>UL Information</b>                                   |                     |                   |                |
| Flame Rating                                            | HB                  |                   | UL 94          |
| <b>Injection Parameters</b>                             |                     |                   |                |
|                                                         | 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                |                |