

## Technical Data Sheet

### Vitamide AR16N



Polyamide 66

#### Product Description

General purpose, 30% Glass filled Polyamide 66. Suitable for a wide range of applications this grade offers a good balance of flow, tensile, flexural and impact strength. Available with enhanced UV (AR26), heat stability (AR36), Oil Heat Glycol Hydrolysis resistance (AR66), UV and Heat resistance (AR76) and Hydrolysis resistance (AR86). Colour matched compounds and customer specific performance requirements are available on request.

**Processing Method** Injection Molding

**Filler/Reinforcement** Glass Fiber, 30%

| Typical Properties                                      | Nominal Value       | Units             | Test Method    |
|---------------------------------------------------------|---------------------|-------------------|----------------|
| <b>Physical</b>                                         |                     |                   |                |
| Density                                                 | 1.37                | g/cm <sup>3</sup> | ISO 1183       |
| <b>Mechanical</b>                                       |                     |                   |                |
| Tensile Strain at Break                                 | 4                   | %                 | ISO 527-2      |
| Flexural Modulus                                        | 10000               | MPa               | ISO 178        |
| Tensile Stress at Break                                 | 190                 | MPa               | ISO 527-2      |
| Flexural Stress                                         | 260                 | MPa               | ISO 178        |
| <b>Impact</b>                                           |                     |                   |                |
| Notched Izod Impact Strength                            | 14                  | kJ/m <sup>2</sup> | ISO 180        |
| <b>Hardness</b>                                         |                     |                   |                |
| Rockwell Hardness, (R-Scale)                            | 120                 |                   | ISO 2039-2     |
| <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>                                       |                     |                   |                |
| Comparative Tracking Index (CTI), (Solution A)          | 450                 | V                 | IEC 60112      |
| Surface Resistivity                                     | 1000000000<br>00000 | ohm               | IEC 60093      |
| <b>Flammable</b>                                        |                     |                   |                |
| Burning Rate, (FMVSS 302)                               | <100                | mm/min            | FMVSS 302      |
| Glow Wire Flammability Index                            | 700                 | °C                | IEC 60695-2-12 |
| <b>Additional Information</b>                           |                     |                   |                |
| Molding Shrinkage                                       | 0.35                | %                 | ISO 294-4      |
| Water Absorption 24h/23C                                | 1.1                 | %                 | ISO 62         |
| <b>UL Information</b>                                   |                     |                   |                |
| Flame Rating, (1.6 mm)                                  | HB                  |                   | UL 94          |
| <b>Injection Parameters</b>                             |                     |                   |                |
| 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                |                |