

## Technical Data Sheet

### Schulamid 66 GF15 HI NAT

Polyamide 66

#### Product Description

15% glass fibre reinforced PA 66, impact modified

**Processing Method** Injection Molding

**Attribute** Impact Modified

**Filler/Reinforcement** Glass Fiber, 15%

| Typical Properties                               | Nominal Value | Units             | Test Method |
|--------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                  |               |                   |             |
| Density, (Method A)                              | 1.20          | g/cm <sup>3</sup> | ISO 1183    |
| <b>Mechanical</b>                                |               |                   |             |
| Flexural Strain at Flexural Strength             | 6.5           | %                 | ISO 178     |
| Tensile Strain at Break                          |               |                   |             |
| (Type 1A, 5 mm/min)                              | 3.6           | %                 | ISO 527-2   |
| (Type 1A, 5 mm/min) - Conditioned                | 15            | %                 | ISO 527-2   |
| Flexural Modulus, (2.0 mm/min)                   | 3900          | MPa               | ISO 178     |
| Tensile Stress at Break                          |               |                   |             |
| (Type 1A, 5 mm/min)                              | 110           | MPa               | ISO 527-2   |
| (Type 1A, 5 mm/min) - Conditioned                | 72.0          | MPa               | ISO 527-2   |
| Tensile Modulus                                  |               |                   |             |
| (1 mm/min, Type 1A)                              | 5500          | MPa               | ISO 527-1   |
| (1 mm/min, Type 1A) - Conditioned                | 3200          | MPa               | ISO 527-1   |
| Flexural Stress, (2.0 mm/min)                    | 145           | MPa               | ISO 178     |
| <b>Impact</b>                                    |               |                   |             |
| Charpy Impact Strength - Notched                 |               |                   |             |
| (23 °C, Type 1, Edgewise, Notch A)               | 15            | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)              | 8.0           | kJ/m <sup>2</sup> | ISO 179     |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned | 22            | kJ/m <sup>2</sup> | ISO 179     |
| Charpy Impact Strength - Unnotched               |               |                   |             |
| (23 °C, Type 1, Edgewise)                        | 70            | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C, Type 1, Edgewise)                       | 55            | kJ/m <sup>2</sup> | ISO 179     |
| (23 °C, Type 1, Edgewise) - Conditioned          | 95            | kJ/m <sup>2</sup> | ISO 179     |
| <b>Thermal</b>                                   |               |                   |             |
| Vicat Softening Temperature                      |               |                   |             |
| (B (50N), 50 °C/h)                               | 245           | °C                | ISO 306     |
| (A (10N), 50 °C/h)                               | >250          | °C                | ISO 306     |

|                                                                     |      |        |                      |
|---------------------------------------------------------------------|------|--------|----------------------|
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | >250 | °C     | ISO 75-2/B           |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 235  | °C     | ISO 75-2/A           |
| <b>Electrical</b>                                                   |      |        |                      |
| Comparative Tracking Index (CTI), (3.00 mm, Solution A)             | 600  | V      | IEC 60112            |
| <b>Flammable</b>                                                    |      |        |                      |
| Burning Rate                                                        |      |        |                      |
| (2.00 mm)                                                           | 25   | mm/min | ISO 3795             |
| (2.00 mm)                                                           | 25   | mm/min | FMVSS 302            |
| Glow Wire Flammability Index                                        |      |        |                      |
| (1.5 mm)                                                            | 700  | °C     | IEC 60695-2-12       |
| (3.0 mm)                                                            | 700  | °C     | IEC 60695-2-12       |
| Glow Wire Ignition Temperature                                      |      |        |                      |
| (1.5 mm)                                                            | 725  | °C     | IEC 60695-2-13       |
| (3.0 mm)                                                            | 725  | °C     | IEC 60695-2-13       |
| <b>UL Information</b>                                               |      |        |                      |
| Flammability Classification                                         |      |        |                      |
| (1.5 mm)                                                            | HB   |        | IEC 60695-11-10, -20 |
| (3.0 mm)                                                            | HB   |        | IEC 60695-11-10, -20 |

|                             |  | Nominal Value | Units |
|-----------------------------|--|---------------|-------|
| <b>Injection Parameters</b> |  |               |       |
| Drying Time                 |  | 3.0 to 4.0    | hr    |
| Drying Temperature          |  | 80            | °C    |
| Suggested Max Moisture      |  | 0.040 to 0.10 | %     |
| Processing (Melt) Temp      |  | 280 to 300    | °C    |
| Mold Temperature            |  | 60 to 120     | °C    |