

## Technical Data Sheet

### Schulamid 66 GF15 LS BLK968001 I



Polyamide 66

#### Product Description

15% glass fibre reinforced PA 66

**Processing Method** Injection Molding

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

| Typical Properties                               | Nominal Value | Units              | Test Method    |
|--------------------------------------------------|---------------|--------------------|----------------|
| <b>Physical</b>                                  |               |                    |                |
| Density, (Method A)                              | 1.23          | g/cm <sup>3</sup>  | ISO 1183       |
| Viscosity Number                                 | 140           | cm <sup>3</sup> /g | ISO 307        |
| <b>Mechanical</b>                                |               |                    |                |
| Flexural Strain at Flexural Strength             | 4             | %                  | ISO 178        |
| Tensile Strain at Break                          |               |                    |                |
| (Type 1A, 5 mm/min)                              | 3.0           | %                  | ISO 527-2      |
| (Type 1A, 5 mm/min) - Conditioned                | 12            | %                  | ISO 527-2      |
| Flexural Modulus                                 | 4900          | MPa                | ISO 178        |
| Tensile Stress at Break                          |               |                    |                |
| (Type 1A, 5 mm/min)                              | 120           | MPa                | ISO 527-2      |
| (Type 1A, 5 mm/min) - Conditioned                | 75.0          | MPa                | ISO 527-2      |
| Tensile Modulus                                  |               |                    |                |
| (1 mm/min, Type 1A)                              | 6200          | MPa                | ISO 527-1      |
| (1 mm/min, Type 1A) - Conditioned                | 3600          | MPa                | ISO 527-1      |
| Flexural Stress                                  | 165           | MPa                | ISO 178        |
| <b>Impact</b>                                    |               |                    |                |
| Charpy Impact Strength - Notched                 |               |                    |                |
| (23 °C, Type 1, Edgewise, Notch A)               | 6.0           | kJ/m <sup>2</sup>  | ISO 179        |
| (-30 °C, Type 1, Edgewise, Notch A)              | 5.0           | kJ/m <sup>2</sup>  | ISO 179        |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned | 7.0           | kJ/m <sup>2</sup>  | ISO 179        |
| Charpy Impact Strength - Unnotched               |               |                    |                |
| (23 °C, Type 1, Edgewise)                        | 30            | kJ/m <sup>2</sup>  | ISO 179        |
| (-30 °C, Type 1, Edgewise)                       | 28            | kJ/m <sup>2</sup>  | ISO 179        |
| (23 °C, Type 1, Edgewise) - Conditioned          | 70            | kJ/m <sup>2</sup>  | ISO 179        |
| <b>Hardness</b>                                  |               |                    |                |
| Ball Indentation Hardness, (H 358/30)            | 170           | MPa                | ISO 2039-1     |
| Ball Pressure Test, (110 °C)                     | Pass          |                    | IEC 60695-10-2 |
| <b>Thermal</b>                                   |               |                    |                |

|                                                                     |             |        |                      |
|---------------------------------------------------------------------|-------------|--------|----------------------|
| 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>                                                   |             |        |                      |
| Volume Resistivity                                                  | >1.0E+13    | ohm*m  | IEC 62631-3-1        |
| - Conditioned                                                       | 10000000000 | ohm*m  | IEC 62631-3-1        |
| Comparative Tracking Index (CTI)                                    | 450         | V      | IEC 60112            |
| Surface Resistivity                                                 | >1.0E+15    | ohm    | IEC 60093            |
| - Conditioned                                                       | 10000000000 | ohm    | IEC 60093            |
| <b>Flammable</b>                                                    |             |        |                      |
| Burning Rate                                                        |             |        |                      |
| (2.00 mm)                                                           | 40          | mm/min | FMVSS 302            |
| (2.00 mm)                                                           | 40          | mm/min | ISO 3795             |
| Glow Wire Flammability Index                                        | 650         | °C     | IEC 60695-2-12       |
| <b>UL Information</b>                                               |             |        |                      |
| Flammability Classification, (0.75 mm)                              | HB          |        | IEC 60695-11-10, -20 |

| Injection Parameters   |  | Nominal Value | Units |
|------------------------|--|---------------|-------|
| 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    |