

## Technical Data Sheet

### Schulamid 6 GF35 LS BUE965057



Polyamide 6

#### Product Description

35% glass fiber reinforced Polyamide 6

|                      |                                                         |
|----------------------|---------------------------------------------------------|
| Processing Method    | Injection Molding                                       |
| Attribute            | Good Flow; High Stiffness; High Strength; Oil Resistant |
| Filler/Reinforcement | Glass Fiber, 35%                                        |
| Resin ID             | PA6-GF35                                                |

| Typical Properties                                                  | Nominal Value | Units              | Test Method    |
|---------------------------------------------------------------------|---------------|--------------------|----------------|
| <b>Physical</b>                                                     |               |                    |                |
| Density, (Method A)                                                 | 1.41          | g/cm <sup>3</sup>  | ISO 1183       |
| Viscosity Number                                                    | 145           | cm <sup>3</sup> /g | ISO 307        |
| <b>Mechanical</b>                                                   |               |                    |                |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                        | 3.4           | %                  | ISO 527-2      |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                        | 180           | MPa                | ISO 527-2      |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 11000         | MPa                | ISO 527-1      |
| <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)                                 | 10            | kJ/m <sup>2</sup>  | ISO 179        |
| Charpy Impact Strength - Unnotched                                  |               |                    |                |
| (23 °C, Type 1, Edgewise)                                           | 90            | kJ/m <sup>2</sup>  | ISO 179        |
| (-30 °C, Type 1, Edgewise)                                          | 70            | kJ/m <sup>2</sup>  | ISO 179        |
| <b>Hardness</b>                                                     |               |                    |                |
| Ball Indentation Hardness, (H 358/30)                               | 230           | MPa                | ISO 2039-1     |
| Ball Pressure Test, (150 °C)                                        | Pass          |                    | IEC 60695-10-2 |
| <b>Thermal</b>                                                      |               |                    |                |
| Vicat Softening Temperature, (B (50N), 50 °C/h)                     | 210           | °C                 | ISO 306        |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 220           | °C                 | ISO 75-2/B     |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 210           | °C                 | ISO 75-2/A     |
| <b>Electrical</b>                                                   |               |                    |                |
| Volume Resistivity                                                  | >1.0E+13      | ohm*m              | IEC 62631-3-1  |
| Comparative Tracking Index (CTI)                                    | 450           | V                  | IEC 60112      |
| Surface Resistivity                                                 | >1.0E+15      | ohm                | IEC 60093      |
| <b>Flammable</b>                                                    |               |                    |                |

|                             |        |        |                      |
|-----------------------------|--------|--------|----------------------|
| Burning Rate                |        |        |                      |
| (2.00 mm)                   | 30     | mm/min | FMVSS 302            |
| (2.00 mm)                   | 30     | mm/min | ISO 3795             |
| UL Information              |        |        |                      |
| Flammability Classification |        |        |                      |
| (1.5 mm)                    | HB     |        | IEC 60695-11-10, -20 |
| (3.0 mm)                    | HB     |        | IEC 60695-11-10, -20 |
| UL File Number              | E86615 |        |                      |

| 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 | 250 to 280    | °C    |
| Mold Temperature       | 60 to 100     | °C    |