

## Technical Data Sheet

### Schulamid 6 GB 15 NAT

Polyamide 6

#### Product Description

15% glass bead filled PA 6

**Processing Method** Injection Molding

**Filler/Reinforcement** Glass Bead, 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                                                    | 145           | cm <sup>3</sup> /g | ISO 307     |
| <b>Mechanical</b>                                                   |               |                    |             |
| Tensile Strain at Break                                             |               |                    |             |
| (Type 1A, 5 mm/min)                                                 | 9.0           | %                  | ISO 527-2   |
| (Type 1A, 5 mm/min) - Conditioned                                   | >50           | %                  | ISO 527-2   |
| Tensile Stress at Break                                             |               |                    |             |
| (Type 1A, 5 mm/min)                                                 | 72.0          | MPa                | ISO 527-2   |
| (Type 1A, 5 mm/min) - Conditioned                                   | 42.0          | MPa                | ISO 527-2   |
| Tensile Modulus                                                     |               |                    |             |
| (1 mm/min, Type 1A)                                                 | 3400          | MPa                | ISO 527-1   |
| (1 mm/min, Type 1A) - Conditioned                                   | 950           | MPa                | ISO 527-1   |
| <b>Impact</b>                                                       |               |                    |             |
| Charpy Impact Strength - Notched                                    |               |                    |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 5.0           | kJ/m <sup>2</sup>  | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 3.5           | kJ/m <sup>2</sup>  | ISO 179     |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned                    | 16            | kJ/m <sup>2</sup>  | ISO 179     |
| Charpy Impact Strength - Unnotched                                  |               |                    |             |
| (23 °C, Type 1, Edgewise)                                           | 45            | kJ/m <sup>2</sup>  | ISO 179     |
| (-30 °C, Type 1, Edgewise)                                          | 26            | kJ/m <sup>2</sup>  | ISO 179     |
| (23 °C, Type 1, Edgewise) - Conditioned                             | No Break      |                    | ISO 179     |
| <b>Thermal</b>                                                      |               |                    |             |
| Vicat Softening Temperature                                         |               |                    |             |
| (B (50N), 50 °C/h)                                                  | 192           | °C                 | ISO 306     |
| (A (10N), 120 °C/h)                                                 | 210           | °C                 | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 165           | °C                 | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 60.0          | °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     |

#### Flammable

|                              |     |        |                |
|------------------------------|-----|--------|----------------|
| Burning Rate                 |     |        |                |
| (2.00 mm)                    | 40  | mm/min | ISO 3795       |
| (2.00 mm)                    | 40  | mm/min | FMVSS 302      |
| Glow Wire Flammability Index | 650 | °C     | IEC 60695-2-12 |

#### UL Information

|                                       |    |                      |
|---------------------------------------|----|----------------------|
| Flammability Classification, (1.5 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 | 250 to 280    | °C    |
| Mold Temperature       | 60 to 100     | °C    |