

## Technical Data Sheet

### Schulamid 6 GF15 HI H U BLK968001



Polyamide 6

#### Product Description

15% glass fiber reinforced PA 6, heat stabilized, impact modified

|                             |                                  |
|-----------------------------|----------------------------------|
| <b>Processing Method</b>    | Injection Molding                |
| <b>Attribute</b>            | Heat Stabilized; Impact Modified |
| <b>Additive</b>             | Heat Stabilizer; Impact Modifier |
| <b>Filler/Reinforcement</b> | 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>                                                    |               |                   |                |
| Tensile Strain at Break                                              |               |                   |                |
| (Type 1A, 5 mm/min)                                                  | 4.2           | %                 | ISO 527-2      |
| (Type 1A, 5 mm/min) - Conditioned                                    | 7.5           | %                 | ISO 527-2      |
| Tensile Stress at Break                                              |               |                   |                |
| (Type 1A, 5 mm/min)                                                  | 100           | MPa               | ISO 527-2      |
| (Type 1A, 5 mm/min) - Conditioned                                    | 60.0          | MPa               | ISO 527-2      |
| Tensile Modulus                                                      |               |                   |                |
| (1 mm/min, Type 1A)                                                  | 5300          | MPa               | ISO 527-1      |
| (1 mm/min, Type 1A) - Conditioned                                    | 3800          | MPa               | ISO 527-1      |
| <b>Impact</b>                                                        |               |                   |                |
| Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A) | 16            | kJ/m <sup>2</sup> | ISO 179        |
| Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)        | 71            | kJ/m <sup>2</sup> | ISO 179        |
| Notched Izod Impact Strength, (23 °C, Type 1, Notch A)               | 14            | kJ/m <sup>2</sup> | ISO 180        |
| Unnotched Izod Impact Strength, (23 °C, Type 1)                      | 60            | kJ/m <sup>2</sup> | ISO 180        |
| <b>Hardness</b>                                                      |               |                   |                |
| Ball Indentation Hardness, (H 358/30)                                | 150           | MPa               | ISO 2039-1     |
| Ball Pressure Test, (90 °C)                                          | Pass          |                   | IEC 60695-10-2 |
| <b>Thermal</b>                                                       |               |                   |                |
| Vicat Softening Temperature                                          |               |                   |                |
| (B (50N), 50 °C/h)                                                   | 200           | °C                | ISO 306        |
| (A (10N), 120 °C/h)                                                  | 210           | °C                | ISO 306        |

|                                                                        |                    |        |                |
|------------------------------------------------------------------------|--------------------|--------|----------------|
| Deflection Temperature Under Load Unannealed (0.45 MPa),<br>(Flatwise) | 200                | °C     | ISO 75-2/B     |
| Deflection Temperature Under Load Unannealed (1.80 MPa),<br>(Flatwise) | 190                | °C     | ISO 75-2/A     |
| <b>Electrical</b>                                                      |                    |        |                |
| Volume Resistivity                                                     | >1.0E+13           | ohm*m  | IEC 62631-3-1  |
| - Conditioned                                                          | 10000000000<br>0   | ohm*m  | IEC 62631-3-1  |
| Comparative Tracking Index (CTI)                                       | 450                | V      | IEC 60112      |
| Surface Resistivity                                                    | >1.0E+15           | ohm    | IEC 60093      |
| - Conditioned                                                          | 10000000000<br>000 | ohm    | IEC 60093      |
| <b>Flammable</b>                                                       |                    |        |                |
| Burning Rate                                                           |                    |        |                |
| (2.00 mm)                                                              | <100               | mm/min | FMVSS 302      |
| (2.00 mm)                                                              | <100               | mm/min | ISO 3795       |
| Glow Wire Flammability Index                                           | 650                | °C     | IEC 60695-2-12 |

| <b>Injection Parameters</b> |  | <b>Nominal Value</b> | <b>Units</b> |
|-----------------------------|--|----------------------|--------------|
| Drying Time                 |  | 3.0 to 4.0           | hr           |
| Suggested Max Moisture      |  | 0.040 to<br>0.10     | %            |
| Processing (Melt) Temp      |  | 250 to 280           | °C           |
| Mold Temperature            |  | 60 to 100            | °C           |