

## Technical Data Sheet

### Schulamid 6 GBF3015 FR2 BLK968001



Polyamide 6

#### Product Description

30% glass fibre and glass bead reinforced flame retardant PA6 compound, increased strength and dimensional stability; halogenfree; PBDE free, with low warpage

|                             |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| <b>Processing Method</b>    | Injection Molding                                                               |
| <b>Attribute</b>            | Good Dimensional Stability; Good Strength; Halogen Free; Low Warpage; PFAS free |
| <b>Additive</b>             | Flame Retardant                                                                 |
| <b>Filler/Reinforcement</b> | Glass Bead\Glass Fiber, 30%                                                     |
| <b>Resin ID</b>             | PA6                                                                             |

| Typical Properties                               | Nominal Value | Units             | Test Method |
|--------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                  |               |                   |             |
| Density, (Method A)                              | 1.42          | g/cm <sup>3</sup> | ISO 1183    |
| <b>Mechanical</b>                                |               |                   |             |
| Tensile Strain at Break                          |               |                   |             |
| (Type 1A, 5 mm/min)                              | 2.7           | %                 | ISO 527-2   |
| (Type 1A, 5 mm/min) - Conditioned                | 5.5           | %                 | ISO 527-2   |
| Tensile Stress at Break                          |               |                   |             |
| (Type 1A, 5 mm/min)                              | 110           | MPa               | ISO 527-2   |
| (Type 1A, 5 mm/min) - Conditioned                | 62.0          | MPa               | ISO 527-2   |
| Tensile Modulus                                  |               |                   |             |
| (1 mm/min, Type 1A)                              | 8300          | MPa               | ISO 527-1   |
| (1 mm/min, Type 1A) - Conditioned                | 4400          | MPa               | ISO 527-1   |
| <b>Impact</b>                                    |               |                   |             |
| Charpy Impact Strength - Notched                 |               |                   |             |
| (23 °C, Type 1, Edgewise, Notch A)               | 7.0           | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)              | 5.5           | kJ/m <sup>2</sup> | ISO 179     |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned | 13            | kJ/m <sup>2</sup> | ISO 179     |
| Charpy Impact Strength - Unnotched               |               |                   |             |
| (23 °C, Type 1, Edgewise)                        | 46            | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C, Type 1, Edgewise)                       | 40            | kJ/m <sup>2</sup> | ISO 179     |
| (23 °C, Type 1, Edgewise) - Conditioned          | 50            | kJ/m <sup>2</sup> | ISO 179     |
| <b>Thermal</b>                                   |               |                   |             |
| Vicat Softening Temperature                      |               |                   |             |
| (B (50N), 50 °C/h)                               | 208           | °C                | ISO 306     |
| (A (10N), 120 °C/h)                              | 215           | °C                | ISO 306     |

|                                                                     |     |    |                      |
|---------------------------------------------------------------------|-----|----|----------------------|
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 214 | °C | ISO 75-2/B           |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 198 | °C | ISO 75-2/A           |
| <b>Electrical</b>                                                   |     |    |                      |
| Comparative Tracking Index (CTI)                                    | 425 | V  | IEC 60112            |
| <b>Flammable</b>                                                    |     |    |                      |
| Glow Wire Flammability Index                                        |     |    |                      |
| (0.75 mm)                                                           | 960 | °C | IEC 60695-2-12       |
| (1.5 mm)                                                            | 960 | °C | IEC 60695-2-12       |
| (3.0 mm)                                                            | 960 | °C | IEC 60695-2-12       |
| Glow Wire Ignition Temperature                                      |     |    |                      |
| (0.75 mm)                                                           | 750 | °C | IEC 60695-2-13       |
| (1.5 mm)                                                            | 750 | °C | IEC 60695-2-13       |
| (3.0 mm)                                                            | 750 | °C | IEC 60695-2-13       |
| Oxygen Index                                                        | 35  | %  | ISO 4589-2           |
| <b>UL Information</b>                                               |     |    |                      |
| Flammability Classification                                         |     |    |                      |
| (0.75 mm)                                                           | V-0 |    | IEC 60695-11-10, -20 |
| (1.5 mm)                                                            | V-0 |    | IEC 60695-11-10, -20 |
| (3.0 mm)                                                            | V-0 |    | IEC 60695-11-10, -20 |

| <b>Injection Parameters</b> | <b>Nominal Value</b> | <b>Units</b> |
|-----------------------------|----------------------|--------------|
| Drying Time                 | 3.0 to 4.0           | hr           |
| Drying Temperature          | 80                   | °C           |
| Suggested Max Moisture      | 0.040 to 0.10        | %            |
| Screw Speed                 | <250                 | mm/sec       |
| Processing (Melt) Temp      | 240 to 270           | °C           |
| Injection Rate              | Slow-Moderate        |              |
| Back Pressure               | <250                 | mm/sec       |
| Mold Temperature            | 60 to 100            | °C           |