

Technical Data Sheet

Schulamid SAM 6 GF 30 HI K1753 BLK 96.8001 M



Polyamide 6

Product Description

30% glass fiber reinforced PA 6, impact modified

| | |
|-----------------------------|-------------------|
| Processing Method | Injection Molding |
| Attribute | Impact Modified |
| Additive | Impact Modifier |
| Filler/Reinforcement | Glass Fiber, 30% |

| Typical Properties | Nominal Value | Units | Test Method |
|--|---------------|--------------------|-------------|
| Physical | | | |
| Density, (Method A) | 1.30 | g/cm ³ | ISO 1183 |
| Viscosity Number | 145 | cm ³ /g | ISO 307 |
| Mechanical | | | |
| Tensile Strain at Break | | | |
| (Type 1A, 5 mm/min) | 4.0 | % | ISO 527-2 |
| (Type 1A, 5 mm/min) - Conditioned | 9.0 | % | ISO 527-2 |
| Tensile Stress at Break | | | |
| (Type 1A, 5 mm/min) | 130 | MPa | ISO 527-2 |
| (Type 1A, 5 mm/min) - Conditioned | 90.0 | MPa | ISO 527-2 |
| Tensile Modulus | | | |
| (1 mm/min, Type 1A) | 8200 | MPa | ISO 527-1 |
| (1 mm/min, Type 1A) - Conditioned | 4700 | MPa | ISO 527-1 |
| Impact | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C, Type 1, Edgewise, Notch A) | 25 | kJ/m ² | ISO 179 |
| (-30 °C, Type 1, Edgewise, Notch A) | 12 | kJ/m ² | ISO 179 |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned | 35 | kJ/m ² | ISO 179 |
| Charpy Impact Strength - Unnotched | | | |
| (23 °C, Type 1, Edgewise) | 85 | kJ/m ² | ISO 179 |
| (-30 °C, Type 1, Edgewise) | 75 | kJ/m ² | ISO 179 |
| (23 °C, Type 1, Edgewise) - Conditioned | 95 | kJ/m ² | ISO 179 |
| Thermal | | | |
| Vicat Softening Temperature | | | |
| (B (50N), 50 °C/h) | 202 | °C | ISO 306 |
| (A (10N), 120 °C/h) | 217 | °C | ISO 306 |

| | | |
|---|----------------|---------------|
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 215 °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 200 °C | ISO 75-2/A |
| Electrical | | |
| Volume Resistivity | >1.0E+13 ohm*m | IEC 62631-3-1 |
| Surface Resistivity | >1.0E+15 ohm | IEC 60093 |
| Flammable | | |
| Burning Rate | | |
| (2.00 mm) | <100 mm/min | ISO 3795 |
| (2.00 mm) | <100 mm/min | FMVSS 302 |

| 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 |