

Technical Data Sheet

Schulamid 6 GF15 BLK 968001

Polyamide 6

Product Description

15% glass fibre reinforced Polyamide 6

| | |
|-----------------------------|---|
| Processing Method | Injection Molding |
| Attribute | Good Flow; Good Surface Finish; Oil Resistant |
| Filler/Reinforcement | Glass Fiber, 15% |
| Resin ID | PA6 GF15 |

| Typical Properties | Nominal Value | Units | Test Method |
|--|---------------|--------------------|-------------|
| Physical | | | |
| Density, (Method A) | 1.23 | g/cm ³ | ISO 1183 |
| Viscosity Number | 145 | cm ³ /g | ISO 307 |
| Mechanical | | | |
| Flexural Strain at Flexural Strength | 6.5 | % | ISO 178 |
| Tensile Strain at Break | | | |
| (Type 1A, 5 mm/min) | 3.5 | % | ISO 527-2 |
| (Type 1A, 5 mm/min) - Conditioned | 15 | % | ISO 527-2 |
| Flexural Modulus, (2.0 mm/min) | 4300 | MPa | ISO 178 |
| Tensile Stress at Break | | | |
| (Type 1A, 5 mm/min) | 130 | MPa | ISO 527-2 |
| (Type 1A, 5 mm/min) - Conditioned | 70.0 | MPa | ISO 527-2 |
| Tensile Modulus | | | |
| (1 mm/min, Type 1A) | 5800 | MPa | ISO 527-1 |
| (1 mm/min, Type 1A) - Conditioned | 3000 | MPa | ISO 527-1 |
| Flexural Stress, (2.0 mm/min) | 170 | MPa | ISO 178 |
| Impact | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C, Type 1, Edgewise, Notch A) | 7.0 | kJ/m ² | ISO 179 |
| (-30 °C, Type 1, Edgewise, Notch A) | 5.0 | kJ/m ² | ISO 179 |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned | 15 | kJ/m ² | ISO 179 |
| Charpy Impact Strength - Unnotched | | | |
| (23 °C, Type 1, Edgewise) | 45 | kJ/m ² | ISO 179 |
| (-30 °C, Type 1, Edgewise) | 40 | kJ/m ² | ISO 179 |
| (23 °C, Type 1, Edgewise) - Conditioned | No Break | | ISO 179 |
| Hardness | | | |
| Ball Indentation Hardness, (H 358/30) | 174 | MPa | ISO 2039-1 |

Thermal

| | | | |
|---|-----|----|------------|
| Vicat Softening Temperature | | | |
| (B (50N), 50 °C/h) | 210 | °C | ISO 306 |
| (A (10N), 50 °C/h) | 215 | °C | ISO 306 |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 210 | °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 200 | °C | ISO 75-2/A |

Flammable

| | | | |
|------------------------------|-----|--------|----------------|
| Burning Rate | | | |
| (2.00 mm) | 43 | mm/min | ISO 3795 |
| (2.00 mm) | 43 | mm/min | FMVSS 302 |
| Glow Wire Flammability Index | | | |
| (1.5 mm) - Conditioned | 650 | °C | IEC 60695-2-12 |
| (3.0 mm) - Conditioned | 650 | °C | IEC 60695-2-12 |

UL Information

| | | | |
|-----------------------------|--------|--|----------------------|
| Flammability Classification | | | |
| (0.75 mm) | HB | | IEC 60695-11-10, -20 |
| (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 |