Technical Data Sheet

Schulamid 6 GF15 HI H LW BKR968069

Polyamide 6

Product Description

15% glass fiber reinforced PA 6, heat stabilized, impact modified, black and laser transparent for laser welding

Processing Method	Injection Molding
Attribute	Heat Stabilized; Impact Modified; Laser Weldable
Appearance	Black
Additive	Heat Stabilizer; Impact Modifier
Filler/Reinforcement	Glass Fiber, 15%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.20	g/cm³	ISO 1183
Mechanical			
Flexural Strain at Flexural Strength	6.5	%	ISO 178
Tensile Strain at Break			
(Type 1A, 5 mm/min)	6.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	20	%	ISO 527-2
Flexural Modulus	3500	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	100	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	62.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	4600	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	2500	MPa	ISO 527-1
Flexural Stress	140	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	20	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	14	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	40	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	75	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	70	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	149	MPa	ISO 2039-1

Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	205	°C	ISO 306
(A (10N), 120 °C/h)	215	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	205	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	185	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*cm	IEC 60093
- Conditioned	10000000000	ohm*cm	IEC 60093
Comparative Tracking Index (CTI)	450	V	IEC 60112
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
Glow Wire Flammability Index	650	°C	IEC 60695-2-12

Injection Parameters	Nominal Value	Units
Drying Time, - Conditioned	3.0 to 4.0	hr
Drying Temperature, - Conditioned	80	°C
Suggested Max Moisture, - Conditioned	0.040 to 0.10	%
Processing (Melt) Temp, - Conditioned	250 to 280	°C
Mold Temperature, - Conditioned	60 to 100	°C