Technical Data Sheet

Schulamid 6 GF30 H BLK968148

Polyamide 6

Product Description

Schulamid 6 GF30 H BLK968148 is a Polyamide 6 Glass Fiber, 30% filled material and is typically used in Injection Molding applications. Features include: Good Toughness, Heat Aging Resistant, High Stiffness, and Oil Resistant.

Processing Method	Injection Molding
Attribute	Good Heat Aging Resistance; Good Toughness; High Stiffness; Oil Resistant
Filler/Reinforcement	Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.35	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
Flexural Strain at Flexural Strength	3.7	%	ISO 178
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	8.0	%	ISO 527-2
Flexural Modulus	7800	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	170	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	100	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	9500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	5000	MPa	ISO 527-1
Flexural Stress	210	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	12	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	9.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	30	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	80	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	200	MPa	ISO 2039-1

Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	210	°C	ISO 306
(A (10N), 50 °C/h)	217	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	220	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	205	°C	ISO 75-2/A
RTI Elec			
(1.5 mm)	125	°C	UL 746B
(3.0 mm)	125	°C	UL 746B
(0.75 mm)	125	°C	UL 746B
RTI Imp			
(1.5 mm)	120	°C	UL 746B
(3.0 mm)	125	°C	UL 746B
(0.75 mm)	115	°C	UL 746B
RTI Str			
(1.5 mm)	130	°C	UL 746B
(3.0 mm)	130	°C	UL 746B
(0.75 mm)	130	°C	UL 746B
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	>1.0E+10	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	450	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	30	mm/min	FMVSS 302
(2.00 mm)	30	mm/min	ISO 3795
Additional Information			
Water Absorption 23C/50RH	2	%	ISO 62
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, (Desiccant Dryer)	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	250 to 280	°C
Mold Temperature	60 to 100	°C