

Technical Data Sheet

Schulamid 6GF35H-31BLK

Polyamide 6

Product Description

Schulamid 6GF35H-31BLK is a Polyamide 6 Glass Fiber, 35% filled material and is typically used in Injection Molding applications. Features include: Heat Stabilized.

Processing Method	Injection Molding
Attribute	Heat Stabilized
Additive	Heat Stabilizer
Filler/Reinforcement	Glass Fiber, 35%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.41	g/cm ³	ISO 1183
Viscosity Number	145	cm ³ /g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	6.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	190	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	115	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	11000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	7000	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	13	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	10	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	24	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)	70	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	230	MPa	ISO 2039-1
Ball Pressure Test, (150 °C)	Pass		IEC 60695-10-2
Thermal			

Vicat Softening Temperature, (B (50N), 50 °C/h)	210 °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)	210 °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	10000000000 0 ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	450 V	IEC 60112
Surface Resistivity	>1.0E+15 ohm	IEC 60093
- Conditioned	10000000000 000 ohm	IEC 60093

Flammable

Burning Rate		
(2.00 mm)	30 mm/min	ISO 3795
(2.00 mm)	30 mm/min	FMVSS 302
Glow Wire Flammability Index		
(1.5 mm)	650 °C	IEC 60695-2-12
(3.0 mm)	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

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