Technical Data Sheet

Schulamid 6 GF30 HI K1871 BLK968001

Polyamide 6

Product Description

30% glass fiber reinforced high impact Polyamide 6, customer specific grade

Processing Method	Injection Molding
Attribute	Good Flow; Good Toughness; High Strength; Impact Modified; Oil Resistant
Filler/Reinforcement	Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.31	g/cm³	ISO 1183
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)	135	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	85.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8300	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	5000	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	18	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	12	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)	85	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	78	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	95	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	205	°C	ISO 306
(A (10N), 50 °C/h)	220	°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
Comparative Tracking Index (CTI)	550	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	45	mm/min	ISO 3795
(2.00 mm)	45	mm/min	FMVSS 302
Glow Wire Flammability Index	650	°C	IEC 60695-2-12
Additional Information			
Water Absorption 23C/50RH	1.9	%	ISO 62
UL Information			
Flammability Classification			
(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