Technical Data Sheet

Schulamid 66 CF20 H BLK968001

Polyamide 66

Product Description

20% carbon fiber reinforced Polyamide 66, available with different kinds of heat stabilizations systems

Processing Method	Injection Molding
Filler/Reinforcement	Carbon Fiber, 20%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.22	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.8	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	5.3	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	15000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	220	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	150	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	16600	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	10100	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 3.0%)	330	MPa	ISO 178
(2.0 mm/min, 3.0%)	340	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.5	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	12	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	70	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	90	kJ/m²	ISO 179
Thermal			
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	250	°C	ISO 75-2/A
Electrical			

Volume Resistivity	100	ohm*m	IEC 62631-3-1
Surface Resistivity	1000	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
UL Information			
Flammability Classification			
(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	280 to 300	°C
Mold Temperature	60 to 120	°C