

Technical Data Sheet

Schulamid SAM 6 GF 30 HI K1753 BLK 96.8001 M



Polyamide 6

Product Description

30% glass fiber reinforced PA 6, impact modified

Processing Method Injection Molding

Attribute Impact Modified

Additive Impact Modifier

Filler/Reinforcement Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.30	g/cm ³	ISO 1183
Viscosity Number	145	cm ³ /g	ISO 307
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)	130	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	90.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8200	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	4700	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	25	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	12	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	35	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)	75	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	95	kJ/m ²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	202	°C	ISO 306
(A (10N), 120 °C/h)	217	°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
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

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