

Technical Data Sheet

Schulamid RD6 GF 30 HI H BLACK



Polyamide 6

Product Description

30% glass fiber reinforced compound based on Polyamide 6

Processing Method	Injection Molding
Attribute	Good Dimensional Stability; Good Flow; Good Processability; Low Density; Low Gloss; Low Moisture Absorption; Noise Damping; Oil Resistant
Additive	Hydrolysis Resistant
Filler/Reinforcement	Glass Fiber, 30%
Resin ID	PA6-I-GF30

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.25	g/cm ³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.5	%	ISO 527-2
Flexural Modulus	7000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	130	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	95.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8700	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	6700	MPa	ISO 527-1
Flexural Stress, (3.3%)	180	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	14	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	17	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	56	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	46	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	60	kJ/m ²	ISO 179
Thermal			

Vicat Softening Temperature			
(B (50N), 50 °C/h)	175	°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)	190	°C	ISO 75-2/A
RTI Elec, (1.5 mm)	65.0	°C	UL 746B
RTI Imp, (1.5 mm)	65.0	°C	UL 746B
RTI Str, (1.5 mm)	65.0	°C	UL 746B
Flammable			
Burning Rate			
(2.00 mm)	12	mm/min	FMVSS 302
(2.00 mm)	12	mm/min	ISO 3795
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		250 to 280	°C
Mold Temperature		60 to 100	°C