

Technical Data Sheet

Schulamid 6 GF 15 HI K1992 NAT

Polyamide 6

Product Description

15% glass fiber reinforced and impact modified Polyamide 6

Processing Method	Injection Molding
Attribute	Good Processability; Good Toughness; High Impact Resistance; Oil Resistant
Filler/Reinforcement	Glass Fiber, 15%
Resin ID	PA6I-GF15

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.20	g/cm ³	ISO 1183
Viscosity Number	145	cm ³ /g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	5.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	15	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	100	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	60.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	5000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	2600	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	16	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	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)	70	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	56	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	205	°C	ISO 306
(A (10N), 50 °C/h)	215	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	210	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	190	°C	ISO 75-2/A
Electrical			
Volume Resistivity	1000000000 0000	ohm*m	IEC 62631-3-1
- Conditioned	1000000000 0	ohm*m	IEC 62631-3-1
Surface Resistivity	1E+15	ohm	IEC 60093
- Conditioned	1000000000 000	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	50	mm/min	ISO 3795
(2.00 mm)	50	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			
(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