

Technical Data Sheet

Schulamid 6 GF15 HI 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	FMVSS 302
(2.00 mm)	50	mm/min	ISO 3795
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