

Technical Data Sheet

Schulamid 6 GB30 HE NAT



Polyamide 6

Product Description

30% glass bead filled PA 6

Processing Method Injection Molding

Filler/Reinforcement Glass Bead, 30%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.36	g/cm ³	ISO 1183
Viscosity Number	145	cm ³ /g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	8.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	12	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	80.0	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	50.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	4500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1800	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	14	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A) - Conditioned	4.0	kJ/m ²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	30	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise)	28	kJ/m ²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	45	kJ/m ²	ISO 179
(-30 °C, Type 1, Edgewise) - Conditioned	35	kJ/m ²	ISO 179
Hardness			
Ball Indentation Hardness, (H 358/30)	165	MPa	ISO 2039-1
Ball Pressure Test, (105 °C)	Pass		IEC 60695-10-2
Thermal			

Vicat Softening Temperature			
(B (50N), 50 °C/h)	200	°C	ISO 306
(A (10N), 120 °C/h)	210	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	180	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	70.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	450	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	80	mm/min	FMVSS 302
(2.00 mm)	80	mm/min	ISO 3795
Glow Wire Flammability Index	650	°C	IEC 60695-2-12
UL Information			
Flammability Classification, (1.5 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