Technical Data Sheet

Schulamid 6 GB50 BUE965190

Polyamide 6

Product Description
50% glass bead reinforced Polyamide 6 with higher stiffness and dimension stability

Processing Method	Injection Molding
Attribute	Good Dimensional Stability; Good Surface Finish; Low Warpage; Oil Resistant
Filler/Reinforcement	Glass Bead, 50%
Resin ID	PA6-GB50

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.54	g/cm³	ISO 1183
Viscosity Number	130	cm³/g	ISO 307
Mechanical			
Flexural Strain at Flexural Strength	3.5	%	ISO 178
Tensile Strain at Break, (Type 1A, 5 mm/min)	2.5	%	ISO 527-2
Flexural Modulus	5700	MPa	ISO 178
Tensile Stress at Break, (Type 1A, 5 mm/min)	77.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	6000	MPa	ISO 527-1
Flexural Stress	135	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	40	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	32	kJ/m²	ISO 179
Thermal			
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	185	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	75.0	°C	ISO 75-2/A
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	>1.0E+10	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	450	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093

Flammable			
Burning Rate			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	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
UL File Number	E86615		

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