

## Technical Data Sheet

**Schulamid 6 GB50 BUE965190**

Polyamide 6

**Product Description**

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

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

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.54	g/cm <sup>3</sup>	ISO 1183
Viscosity Number	130	cm <sup>3</sup> /g	ISO 307
<b>Mechanical</b>			
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
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	40	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	32	kJ/m <sup>2</sup>	ISO 179
<b>Thermal</b>			
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
<b>Electrical</b>			
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**

<b>Burning Rate</b>			
(2.00 mm)	<100	mm/min	ISO 3795
(2.00 mm)	<100	mm/min	FMVSS 302
<b>Glow Wire Flammability Index</b>			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	650	°C	IEC 60695-2-12

**UL Information**

<b>Flammability Classification</b>		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20
<b>UL File Number</b>	E86615	

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
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