

## Technical Data Sheet

**Schulamid 66 GBF3020 GRY967864**

Polyamide 66

**Product Description**

*Schulamid 66 GBF3020 GRY967864* is a Polyamide 66 Glass Bead\Glass Fiber, 30% filled material and is typically used in Injection Molding applications. Features include: Balanced Stiffness/Toughness, Good Flow, Low Warpage, and Oil Resistant.

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Flow; Good Stiffness/Impact Balance; Low Warpage; Oil Resistant
<b>Filler/Reinforcement</b>	Glass Bead\Glass Fiber, 30%

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.35	g/cm <sup>3</sup>	ISO 1183
Viscosity Number	145	cm <sup>3</sup> /g	ISO 307
<b>Mechanical</b>			
Flexural Strain at Flexural Strength	4.5	%	ISO 178
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	10	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	6000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	130	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	80.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	7600	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	4400	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min)	190	MPa	ISO 178
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	14	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	6.0	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	18	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)	35	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	60	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			

<b>Ball Indentation Hardness</b>			
(H 358/30)	220	MPa	ISO 2039-1
(H 358/30) - Conditioned	140	MPa	ISO 2039-1
Ball Pressure Test, (140 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			
<b>Vicat Softening Temperature</b>			
(B (50N), 50 °C/h)	235	°C	ISO 306
(A (10N), 50 °C/h)	240	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	245	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	245	°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
<b>Flammable</b>			
<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
<b>Additional Information</b>			
Water Absorption 23C/50RH	2	%	ISO 62
<b>UL Information</b>			
<b>Flammability Classification</b>			
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20
<b>Injection Parameters</b>			
Drying Time	3.0 to 4.0	hr	
Drying Temperature	80	°C	
Suggested Max Moisture	0.040 to 0.10	%	
Processing (Melt) Temp	280 to 300	°C	
Mold Temperature	60 to 120	°C	