

## Technical Data Sheet

**Schulamid 66 GRF2318 H BLK 968001**

Polyamide 66

**Product Description**

*Schulamid 66 GRF2318 H BLK 968001* is a Polyamide 66 Glass Fiber\Graphite, 23% filled material and is typically used in Injection Molding applications. Features include: Good Processability, Heat Aging Resistant, Low Warpage, Lubricated, and Oil Resistant.

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Heat Aging Resistance; Good Processability; Low Warpage; Lubricated; Oil Resistant
<b>Filler/Reinforcement</b>	Glass Fiber\Graphite, 23%

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.30	g/cm <sup>3</sup>	ISO 1183
Viscosity Number	145	cm <sup>3</sup> /g	ISO 307
<b>Mechanical</b>			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	8.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	140	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	85.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	7500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	4800	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.0	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	8.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	45	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	40	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	70	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Indentation Hardness			
(H 358/30)	180	MPa	ISO 2039-1
(H 358/30) - Conditioned	110	MPa	ISO 2039-1

Ball Pressure Test, (110 °C)	Pass	IEC 60695-10-2
<b>Thermal</b>		
Vicat Softening Temperature		
(B (50N), 50 °C/h)	245 °C	ISO 306
(A (10N), 50 °C/h)	>250 °C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	>250 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	240 °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
Surface Resistivity	>1.0E+15 ohm	IEC 60093
- Conditioned	>1.0E+12 ohm	IEC 60093
<b>Flammable</b>		
Burning Rate		
(2.00 mm)	40 mm/min	FMVSS 302
(2.00 mm)	40 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
<b>Additional Information</b>		
Water Absorption 23C/50RH	2.2 %	ISO 62
<b>UL Information</b>		
Flammability Classification		
(1.5 mm)	HB	IEC 60695-11-10, -20
(3.0 mm)	HB	IEC 60695-11-10, -20
<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	280 to 300	°C
Mold Temperature	60 to 120	°C