

## Technical Data Sheet

### Schulamid 66 GF50 H BLK968001



Polyamide 66

#### Product Description

Schulamid 66 GF50 H BLK968001 is a Polyamide 66 Glass Fiber, 50% filled material and is typically used in Injection Molding applications. Features include: Crack Resistant, Good Processability, Good Toughness, Heat Aging Resistant, Low Moisture Absorption, Medium Viscosity, Oil Resistant, and Ultra High Stiffness.

**Processing Method** Injection Molding

**Attribute** Crack Resistant; Good Heat Aging Resistance; Good Processability; Good Toughness; Low Moisture Absorption; Medium Viscosity; Oil Resistant; Ultra High Stiffness

**Filler/Reinforcement** Glass Fiber, 50%

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.57	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.3	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	3.3	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	228	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	180	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	16500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	13000	MPa	ISO 527-1
<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)	12	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)	90	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	70	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	94	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Indentation Hardness			
(H 358/30)	300	MPa	ISO 2039-1
(H 358/30) - Conditioned	220	MPa	ISO 2039-1
<b>Thermal</b>			

<b>Vicat Softening Temperature</b>			
(B (50N), 50 °C/h)	>250	°C	ISO 306
(A (10N), 50 °C/h)	>250	°C	ISO 306
<b>Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)</b>			
	>250	°C	ISO 75-2/B
<b>Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)</b>			
	>250	°C	ISO 75-2/A
<b>RTI Elec</b>			
(1.5 mm)	120	°C	UL 746B
(3.0 mm)	120	°C	UL 746B
(0.75 mm)	120	°C	UL 746B
<b>RTI Imp</b>			
(1.5 mm)	105	°C	UL 746B
(3.0 mm)	115	°C	UL 746B
(0.75 mm)	105	°C	UL 746B
<b>RTI Str</b>			
(1.5 mm)	120	°C	UL 746B
(3.0 mm)	130	°C	UL 746B
(0.75 mm)	120	°C	UL 746B
<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)	30	mm/min	FMVSS 302
(2.00 mm)	30	mm/min	ISO 3795
<b>Glow Wire Flammability Index</b>			
(1.5 mm)	600	°C	IEC 60695-2-12
(3.0 mm)	600	°C	IEC 60695-2-12
<b>Additional Information</b>			
Water Absorption 23C/50RH	1.2	%	ISO 62
<b>UL Information</b>			
<b>Flammability Classification</b>			
(0.75 mm)	HB		IEC 60695-11-10, -20
(1.5 mm)	HB		IEC 60695-11-10, -20
(3.0 mm)	HB		IEC 60695-11-10, -20
UL File Number	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	280 to 300	°C	
Mold Temperature	60 to 120	°C	