

## Technical Data Sheet

**Schulamid 6 GF65 I1 NAT**

Polyamide 6

**Product Description**

65% glass fiber reinforced Polyamide 6 with very high tensile strength and stiffness

<b>Processing Method</b>	Injection Molding
<b>Filler/Reinforcement</b>	Glass Fiber, 65%
<b>Resin ID</b>	PAM 6 GF65

<b>Typical Properties</b>	<b>Nominal Value</b>	<b>Units</b>	<b>Test Method</b>
<b>Physical</b>			
Density, (Method A)	1.77	g/cm <sup>3</sup>	ISO 1183
Viscosity Number, (H <sub>2</sub> SO <sub>4</sub> (Sulphuric Acid))	120	cm <sup>3</sup> /g	ISO 307
<b>Mechanical</b>			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	1.8	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	2.4	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	20000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	235	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	150	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	23000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	14200	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 2.7%)	350	MPa	ISO 178
(2.0 mm/min, 2.6%)	360	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)	13	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	20	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	80	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	77	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	82	kJ/m <sup>2</sup>	ISO 179
<b>Thermal</b>			
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	215	°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
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093

**Flammable**

Burning Rate			
(2.00 mm)	30	mm/min	ISO 3795
(2.00 mm)	30	mm/min	FMVSS 302

**UL Information**

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	250 to 280	°C
Mold Temperature	60 to 100	°C