

## Technical Data Sheet

**Schulamid 6 GF35 GRY967231**

Polyamide 6

**Product Description**

35% glass fiber reinforced Polyamide 6

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Flow; High Stiffness; High Strength; Oil Resistant
<b>Filler/Reinforcement</b>	Glass Fiber, 35%
<b>Resin ID</b>	PA6-GF35

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.41	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)	3.4	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	6.0	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	180	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	110	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	11000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	7000	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	15	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	10	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	32	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	No Break		ISO 179
<b>Hardness</b>			
Ball Indentation Hardness, (H 358/30)	230	MPa	ISO 2039-1
Ball Pressure Test, (150 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			
Vicat Softening Temperature, (B (50N), 50 °C/h)	210	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	220	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	210	°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>			
Burning Rate			
(2.00 mm)	30	mm/min	FMVSS 302
(2.00 mm)	30	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm) - Conditioned	650	°C	IEC 60695-2-12
(3.0 mm) - Conditioned	650	°C	IEC 60695-2-12
<b>UL Information</b>			
Flammability Classification			
(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	250 to 280	°C
Mold Temperature	60 to 100	°C