

Technical Data Sheet

**Schulamid 6 GF25 NAT**



Polyamide 6

**Product Description**

25% glass fibre reinforced Polyamide 6

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Stiffness; Medium Viscosity; Oil Resistant
<b>Filler/Reinforcement</b>	Glass Fiber, 25%
<b>Resin ID</b>	PA6-GF25

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.32	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)	3.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	7.5	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	152	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	90.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	8500	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)	10	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	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)	65	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	55	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
<b>Thermal</b>			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	210	°C	ISO 306
(A (10N), 50 °C/h)	218	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	215 °C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	200 °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
Comparative Tracking Index (CTI)	450 V	IEC 60112
Surface Resistivity	>1.0E+15 ohm	IEC 60093
- Conditioned	>1.0E+12 ohm	IEC 60093

**Flammable**

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) - Conditioned	650 °C	IEC 60695-2-12
(3.0 mm) - Conditioned	650 °C	IEC 60695-2-12

**Additional Information**

Water Absorption 23C/50RH	1.9 %	ISO 62
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**UL Information**

Flammability Classification		
(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	250 to 280	°C
Mold Temperature	60 to 100	°C