

## Technical Data Sheet

### Schulamid 6 GF15 4DD WHI 96.0380



Polyamide 6

#### Product Description

15% glass fibre reinforced flame-retardant Polyamide 6 grade; halogen free; very good surface appearance

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Halogen Free
<b>Additive</b>	Flame Retardant
<b>Filler/Reinforcement</b>	Glass Fiber, 15%
<b>Resin ID</b>	PA6 GF15 FR(40)

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.38	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)	2.8	%	ISO 527-2
Tensile Stress at Break, (Type 1A, 5 mm/min)	95.0	MPa	ISO 527-2
Tensile Modulus, (1 mm/min, Type 1A)	7000	MPa	ISO 527-1
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.5	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m <sup>2</sup>	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise)	45	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Pressure Test, (125 °C)	Pass		IEC 60695-10-2
<b>Thermal</b>			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	212	°C	ISO 306
(A (10N), 50 °C/h)	217	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	217	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	197	°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)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093

**Flammable**

<b>Burning Rate</b>			
(1.50 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(3.00 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
(0.800 mm, Self-Extinguishing)	0.0	mm/min	ISO 3795
<b>Glow Wire Flammability Index</b>			
(0.75 mm)	960	°C	IEC 60695-2-12
(1.5 mm)	960	°C	IEC 60695-2-12
(3.0 mm)	960	°C	IEC 60695-2-12
<b>Glow Wire Ignition Temperature</b>			
(0.75 mm)	750	°C	IEC 60695-2-13
(1.5 mm)	750	°C	IEC 60695-2-13
(3.0 mm)	750	°C	IEC 60695-2-13

**UL Information**

<b>Flammability Classification</b>			
(0.8 mm)	V-0		IEC 60695-11-10, -20
(1.5 mm)	V-0		IEC 60695-11-10, -20
(3.0 mm)	V-0		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	%
Screw Speed	<300	mm/sec
Processing (Melt) Temp	250 to 280	°C
Hopper Temperature	70	°C
Injection Rate	Moderate	
Mold Temperature	60 to 100	°C