Technical Data Sheet

Schulamid 6 GF15 4DD BLACK 96.8001

Polyamide 6

Product Description

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

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

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.38	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
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
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	7.5	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	45	kJ/m²	ISO 179
Hardness			
Ball Pressure Test, (125 °C)	Pass		IEC 60695-10-2
Thermal			
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
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)	600	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093
Flammable			
Burning Rate			
(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
Glow Wire Flammability Index			
(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
Glow Wire Ignition Temperature			
(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			
Flammability Classification			
(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

Injection Parameters	Nominal Value	Units
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