Technical Data Sheet

Schulamid 6 GF 25 H CN1 BLK 968001

Polyamide 6

Product Description
25% glass fibre reinforced PA 6, heat stabilized

Processing Method	Injection Molding
Attribute	Heat Stabilized
Additive	Heat Stabilizer
Filler/Reinforcement	Glass Fiber, 25%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.32	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
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
Flexural Modulus			
(2.0 mm/min)	8000	MPa	ISO 178
(2.0 mm/min) - Conditioned	4600	MPa	ISO 178
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
Flexural Stress			
(2.0 mm/min, 3.5%)	240	MPa	ISO 178
(2.0 mm/min, 3.5%) - Conditioned	125	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	8.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	7.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	15	kJ/m²	ISO 179

Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	50	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Hardness			
Ball Indentation Hardness, (H 961/30)	240	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	210	°C	ISO 306
(A (10N), 120 °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
RTI Elec			
(1.5 mm)	125	°C	UL 746B
(3.0 mm)	125	°C	UL 746B
(0.75 mm)	125	°C	UL 746B
RTI Imp			
(1.5 mm)	120	°C	UL 746B
(3.0 mm)	125	°C	UL 746B
(0.75 mm)	115	°C	UL 746B
RTI Str			
(1.5 mm)	130	°C	UL 746B
(3.0 mm)	130	°C	UL 746B
(0.75 mm)	130	°C	UL 746B
Electrical			
Volume Resistivity	>1.0E+13	ohm*m	IEC 62631-3-1
- Conditioned	10000000000	ohm*m	IEC 62631-3-1
Comparative Tracking Index (CTI)	450	V	IEC 60112
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	1000000000000	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	40	mm/min	ISO 3795
(2.00 mm)	40	mm/min	FMVSS 302
Glow Wire Flammability Index			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	650	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	675	°C	IEC 60695-2-13
(3.0 mm)	675	°C	IEC 60695-2-13
Additional Information			
Water Absorption 23C/50RH	1.9	%	ISO 62
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

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	%
Processing (Melt) Temp	250 to 280	°C
Mold Temperature	60 to 100	°C