Technical Data Sheet

Schulamid 6 GF65 GRY967952

Polyamide 6

Product Description

65% glass fiber reinforced Polyamide 6 with very high tensile strength and stiffness

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 65%
Resin ID	PAM 6 GF65

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.77	g/cm³	ISO 1183
Viscosity Number, (H2SO4 (Sulphuric Acid))	120	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	1.8	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	2.4	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	20000	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	235	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	150	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	23000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	14200	MPa	ISO 527-1
Flexural Stress			
(2.0 mm/min, 2.7%)	350	MPa	ISO 178
(2.0 mm/min, 2.6%)	360	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	14	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	13	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	20	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	80	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	77	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	82	kJ/m²	ISO 179
Thermal			
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	215	°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
Surface Resistivity	>1.0E+15	ohm	IEC 60093
- Conditioned	>1.0E+12	ohm	IEC 60093
Flammable			
Burning Rate			
(2.00 mm)	30	mm/min	FMVSS 302
(2.00 mm)	30	mm/min	ISO 3795
UL Information			
Flammability Classification			
(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