Technical Data Sheet

Schulamid 66 GF33 FC NAT

Polyamide 66

Product Description

33% glassfiber reinforced PA 66 for food contact applications

Processing Method	Injection Molding
Filler/Reinforcement	Glass Fiber, 33%

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.39	g/cm³	ISO 1183
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	2.5	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	4.7	%	ISO 527-2
Flexural Modulus, (2.0 mm/min)	9200	MPa	ISO 178
Tensile Stress at Break			
(Type 1A, 5 mm/min)	170	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	125	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	11000	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	8000	MPa	ISO 527-1
Flexural Stress, (2.0 mm/min, 3.5%)	178	MPa	ISO 178
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	9.0	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	12	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	65	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	60	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	75	kJ/m²	ISO 179
Hardness			
Ball Pressure Test, (185 °C)	Pass		IEC 60695-10-2
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	>250	°C	ISO 306
(A (10N), 50 °C/h)	>250	°C	ISO 306

Deflection Temperature Under Load Unannealed (0.45 MPa)	>250	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	239	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	30	mm/min	FMVSS 302
(2.00 mm)	30	mm/min	ISO 3795
Glow Wire Flammability Index			
(1.5 mm)	650	°C	IEC 60695-2-12
(3.0 mm)	675	°C	IEC 60695-2-12
Glow Wire Ignition Temperature			
(1.5 mm)	675	°C	IEC 60695-2-13
(3.0 mm)	700	°C	IEC 60695-2-13
UL Information			
Flammability Classification			
(0.8 mm)	HB		IEC 60695-11-10, -20
(1.6 mm)	HB		IEC 60695-11-10, -20
(3.2 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	280 to 300	°C
Mold Temperature	60 to 120	°C