Technical Data Sheet

SCHULAKETON GF 10 FC

Polyketone, Aliphatic
Engineering Plastics

Product Description
10% glass fiber reinforced aliphatic Polyketon for food contact applications

General	
Filler / Reinforcement	• Glass Fiber, 10% Filler by Weight
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PK GF10

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.30 g/cm³	1.30 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (240°C/2.16 kg)	20 cm³/10min	20 cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.4 %	1.4 %	
Flow	0.80 %	0.80 %	
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	464000 psi	3200 MPa	ISO 527-2/1A/1
Tensile Stress (Break)	10200 psi	70.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	5.0 %	5.0 %	ISO 527-2/1A/5
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			
-22°F (-30°C)	2.9 ft·lb/in²	6.0 kJ/m²	ISO 179/1eA
73°F (23°C)	3.6 ft·lb/in²	7.5 kJ/m²	ISO 179/1e
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F (-30°C)	17 ft·lb/in²	35 kJ/m²	
73°F (23°C)	29 ft·lb/in²	60 kJ/m²	
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			ISO 75-2/Af
264 psi (1.8 MPa), Unannealed, 0.157 in (4.00 mm)	401 °F	205 °C	
Vicat Softening Temperature			
--	419 °F	215 °C	ISO 306/A50
--	383 °F	195 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	1.0E+15 ohms	1.0E+15 ohms	IEC 60093
Volume Resistivity	1.0E+13 ohms·m	1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index (Solution A)	600 V	600 V	IEC 60112

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 in (2.00 mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1290 °F	700 °C	
0.12 in (3.0 mm)	1290 °F	700 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1340 °F	725 °C	
0.12 in (3.0 mm)	1340 °F	725 °C	

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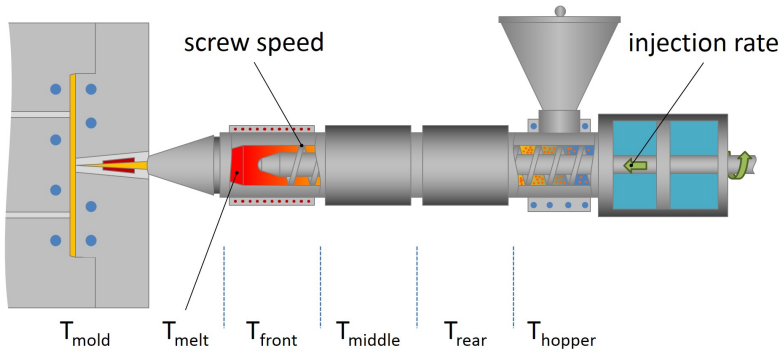

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.15 %	0.15 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	473 to 500 °F	245 to 260 °C
Mold Temperature	140 to 248 °F	60 to 120 °C

Injection Notes

Before start, nozzle, screw, barrel and hot-runner have to be cleaned with Polyolefin. Contamination of other material leads to degradation or crosslinking of SCHULAKETON®.

Avoid shut down for more than 15 minutes at moulding temperature, because of degradation and crosslinking of SCHULAKETON®. Purge with Polyolefin!

Notes

These are typical property values not to be construed as specification limits.