

Technical Data Sheet

Schulaketon GF 10

Polyketone, Aliphatic
LyondellBasell Industries
Engineering Plastics

Product Description

10% glass fiber reinforced aliphatic Polyketone

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/cm ³	1.30 g/cm ³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (240°C/2.16 Kg)	20 cm ³ /10min	20 cm ³ /10min	ISO 1133

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	462000 psi	3190 MPa	ISO 527-1/1A/1
Tensile Stress (Break)	8850 psi	61.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	14 %	14 %	ISO 527-2/1A/5

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			
-40°F (-40°C)	1.9 ft·lb/in ²	4.0 kJ/m ²	ISO 179/1eA
73°F (23°C)	4.1 ft·lb/in ²	8.6 kJ/m ²	ISO 179/1e
Charpy Unnotched Impact Strength			ISO 179/1eU
-40°F (-40°C)	24 ft·lb/in ²	50 kJ/m ²	
73°F (23°C)	29 ft·lb/in ²	60 kJ/m ²	

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			
66 Psi (0.45 Mpa), Unannealed, 0.157 In (4.00 Mm)	417 °F	214 °C	ISO 75-2/Bf
264 Psi (1.8 Mpa), Unannealed, 0.157 In (4.00 Mm)	390 °F	199 °C	ISO 75-2/Af

Vicat Softening Temperature			
--	388 °F	198 °C	ISO 306/B50
--	419 °F	215 °C	ISO 306/A50

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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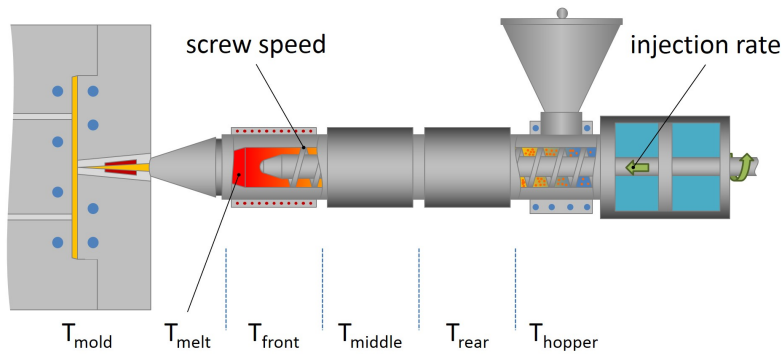
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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	ISO 3795
0.0787 In (2.00 Mm)	< 3.9 in/min	< 100 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 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 %
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.