

Technical Data Sheet

SCHULAKETON LTM006 FC

Polyketone, Aliphatic
Engineering Plastics

Product Description

Aliphatic Polyketon, approved for food contact [FC], low melt type.

General

Features	• Food Contact Acceptable
Processing Method	• Extrusion • Injection Molding
Resin ID (ISO 1043)	• PK

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.22 g/cm ³	1.22 g/cm ³	ISO 1183/A

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	162000 psi	1120 MPa	ISO 527-2
Tensile Stress			
Yield, 73°F (23°C)	6960 psi	48.0 MPa	ISO 527-2/1A/50
Break	9280 psi	64.0 MPa	ISO 527-2
Tensile Strain (Yield, 73°F (23°C))	16 %	16 %	ISO 527-2/1A/50
Nominal Tensile Strain at Break	350 %	350 %	ISO 527-2
Flexural Modulus (73°F (23°C))	155000 psi	1070 MPa	ISO 178
Flexural Strength			
73°F (23°C)	6960 psi	48.0 MPa	ASTM D790
3.5% Strain	4640 psi	32.0 MPa	ISO 178

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-40°F (-40°C)	1.2 ft·lb/in ²	2.5 kJ/m ²	
-22°F (-30°C)	1.6 ft·lb/in ²	3.4 kJ/m ²	
73°F (23°C)	5.3 ft·lb/in ²	11 kJ/m ²	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Shore Hardness (Shore D, 3 sec)	69	69	ISO 7619-1
Ball Indentation Hardness (H 358/30)	11300 psi	78.0 MPa	ISO 2039-1

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	277 °F	136 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	142 °F	61.0 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	363 °F	184 °C	ISO 306/A50
--	307 °F	153 °C	ISO 306/B50
Melting Temperature	385 °F	196 °C	DIN 51007

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	0.79 in/min	20 mm/min	ISO 3795
0.0787 in (2.00 mm)	0.79 in/min	20 mm/min	FMVSS 302
Flame Rating			UL 94
0.06 in (1.6 mm)	HB	HB	IEC 60695-11-10,
0.13 in (3.2 mm)	HB	HB	-20

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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	437 to 464 °F	225 to 240 °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.