LUVOCOM® 3F PET CF 9780 BK

LEHVOSS Group - *Polyethylene Terephthalate*

General Information

Product Description

with carbon fibers; black

Main Features

- Easy to print.
- No warping.
- High z-strength.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber		
Features	• Good Printability	• High Strength	• Warp Resistant
Appearance	• Black		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (270°C/2.16 kg)	8.0	cm³/10min	ISO 1133
Water Absorption (24 hr, 73°F)	< 0.30	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.31E+6	psi	ISO 527-1/1
Tensile Stress	14500	psi	ISO 527-2
Tensile Strain (Yield)	2.5	%	ISO 527-2/50
Flexural Modulus [2]	1.16E+6	psi	ISO 178
Flexural Stress [3]	18900	psi	ISO 178
Flexural Strain - (Yield) [4]	3.5	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength	19	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Service Temperature - during lifetime max. 200 hr	257	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Insulation Resistance [5]	8.5	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
--	176	°F
Desiccant Dryer, A	248	°F
Drying Time		
--	6.0 to 8.0	hr
Desiccant Dryer, A	2.0 to 5.0	hr
Rear Temperature	500 to 572	°F
Middle Temperature	500 to 572	°F
Front Temperature	500 to 572	°F
Nozzle Temperature	482 to 554	°F

Injection Notes

3D Printing parameters may vary from machine to machine. The following settings may be used as an indication: nozzle temperature: 245 - 270 °C / nozzle material: abbrasion resistant / print bed temperature: > 50 °C / layer thickness: > 0,2mm /

printing speed 40 - 60 mm/s.
The processing notes provided merely represent a recommendation for general use. Due to the large variety of machines, geometries and volumes of parts, etc., it may be necessary to employ different settings according to the specific application. Please contact us for further information.

In general LUVOCOM® 3F can be processed on conventional extrusion machines while observing the usual technical guidelines. Any added fibrous materials or fillers may have an abrasive effect. In this case the cylinder, screw and die should be protected against wear as is usual in the processing of reinforced thermoplastic materials. Lengthy dwell times for the melts in the cylinder should be avoided. Lower the temperatures during interruptions!

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 0.079 in/min

[3] 0.39 in/min

[4] 10 mm/min

[5] strip electrode R25