

LUVOCOM® 3F PAHT CF 9742 BK

LEHVOSS Group - Polyamide 66 + PA 6I/6T

General Information

Product Description

with carbon fibers; black

Main Features

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

General

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

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.18E+6	psi	ISO 527-1/1
Tensile Stress	24700	psi	ISO 527-2
Tensile Strain (Yield)	1.0	%	ISO 527-2/50
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength	22	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	392	°F	ISO 75-2/A
Continuous Use Temperature ²	302	°F	IEC 60216
CLTE - Flow	2.2E-6	in/in/°F	ISO 11359-2
Thermal Conductivity ³	6.9	Btu·in/hr/ft ² /°F	ISO 22007
Service Temperature - during lifetime max. 200 hr	356	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+2	ohms	IEC 62631-3-2
Insulation Resistance ⁴	< 1.0E+2	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
--		248 °F
Desiccant Dryer, A		266 °F
Drying Time		
--		4.0 to 6.0 hr
Desiccant Dryer, A		6.0 to 8.0 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: 265 - 290 °C / nozzle material: abrasion 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 20,000 hr

³ in plane; hot disk

⁴ strip electrode R25

