

LUVOCOM® 1104-7824

 LEHVOSS Group - *Polyether Ketone*
General Information
Product Description

with carbon fibers, easy flowing; natural color (black)

Main Features

- Improved strength and stiffness at elevated temperatures.
- Suitable for discharging of statically-generated electricity.

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.34E+6	psi	ISO 527-1/1
Tensile Stress	37000	psi	ISO 527-2
Tensile Strain (Yield)	1.8	%	ISO 527-2/50
Flexural Modulus ²	2.90E+6	psi	ISO 178
Flexural Stress ³	52900	psi	ISO 178
Flexural Strain - (Yield) ⁴	2.4	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	3.3	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength	22	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature ⁵	500	°F	IEC 60216
Vicat Softening Temperature	> 626	°F	ISO 306/A
Service Temperature - during lifetime max. 200 hr	554	°F	
Electrical	Nominal Value	Unit	Test Method
Insulation Resistance ⁶	< 1.0E+3	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Circulation Dryer, B	302	°F
Desiccant Dryer, A	284	°F
Drying Time		
Circulation Dryer, B	4.0 to 8.0	hr
Desiccant Dryer, A	4.0 to 16	hr
Rear Temperature	698 to 734	°F
Middle Temperature	716 to 788	°F
Front Temperature	734 to 788	°F
Nozzle Temperature	734 to 788	°F
Processing (Melt) Temp	734	°F



Injection Notes

Avoid mold temperatures above 230°C.

During processing, the moisture level should not exceed 0.01%, otherwise molecular degradation may occur. As the material absorbs water very quickly, the predried material should be fed to the processing immediately. 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.

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 20,000 hr

⁶ strip electrode R25

