

LUVOCOM® 1106-8465

 LEHVOSS Group - *Polyetherimide*
General Information
Product Description

with carbon fibers, thermally conductive modified; natural color (black)

Main Features

- High dimensionally stable precision parts, even at elevated temperatures and narrow tolerance range.
- Strong, stiff parts.
- Thermally conductive.
- Low warpage.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Carbon Fiber
Features	• High Dimensional Stability • High Stiffness • Low Warpage • High Heat Resistance • High Strength • Thermally Conductive
Appearance	• Black

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.43	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.34E+6	psi	ISO 527-1/1
Tensile Stress	18100	psi	ISO 527-2
Tensile Strain (Yield)	0.60	%	ISO 527-2/50
Flexural Modulus ²	3.19E+6	psi	ISO 178
Flexural Stress ³	28300	psi	ISO 178
Flexural Strain - (Yield) ⁴	0.90	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	3.8	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
--	6.7	ft·lb/in ²	
-22°F	7.6	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ISO 75-2/A
Continuous Use Temperature ⁵	338	°F	IEC 60216
CLTE - Flow	4.4E-6	in/in/°F	ISO 11359-2
Thermal Conductivity ⁶	42	Btu·in/hr/ft ² /°F	ISO 22007
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+5	ohms	IEC 62631-3-2
Insulation Resistance ⁷	< 1.0E+5	ohms	IEC 62631-3-3
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Desiccant Dryer, A		



Desiccant Dryer, B	302 °F
Drying Time	
Desiccant Dryer, A	> 8.0 hr
Desiccant Dryer, B	> 4.0 hr
Rear Temperature	680 to 716 °F
Middle Temperature	680 to 716 °F
Front Temperature	698 to 734 °F
Nozzle Temperature	716 to 752 °F
Processing (Melt) Temp	716 °F
Mold Temperature	320 to 374 °F

Injection Notes

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 in plane; hot disk

⁷ strip electrode R25

