

LUVOCOM® 1105-8740/GN

LEHVOSS Group - *Polyetheretherketone*

General Information

Product Description

unreinforced, laser markable; pale green

Main Features

- Not flammable.
- Highly chemically-resistant parts, non flammable.
- Especially suitable for medical parts, superheated steam sterilizable, hydrolysis resistance.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Hydrolysis Resistant	• Ignition Resistant • Laser Markable	• Steam Sterilizable
Uses	• Medical/Healthcare Applications		
Appearance	• Light Green		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.48	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	725000	psi	ISO 527-1/1
Tensile Stress	12300	psi	ISO 527-2
Tensile Strain (Yield)	4.0	%	ISO 527-2/50
Flexural Modulus ²	580000	psi	ISO 178
Flexural Stress ³	18900	psi	ISO 178
Flexural Strain - (Yield) ⁴	6.0	%	ISO 178
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature ⁵	482	°F	IEC 60216
CLTE - Flow	2.2E-5	in/in/°F	ISO 11359-2
Thermal Conductivity ⁶	2.4	Btu·in/hr/ft ² /°F	ISO 22007
Service Temperature - during lifetime max. 200 hr	518	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+12	ohms	IEC 62631-3-2
Insulation Resistance ⁷	> 1.0E+12	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		
Desiccant Dryer, A	302	°F
Desiccant Dryer, B	248	°F
Drying Time		
Desiccant Dryer, A	3.0 to 6.0	hr
Desiccant Dryer, B	6.0 to 8.0	hr
Rear Temperature	680 to 698	°F
Middle Temperature	716 to 734	°F



Front Temperature	734 to 752 °F
Nozzle Temperature	680 to 716 °F
Mold Temperature	338 to 392 °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

