LUVOCOM® 1104-7452

LEHVOSS Group - *Polyether Ketone*

General Information

Product Description

with glass fibers, easy flowing; black

Main Features

- Improved strength and stiffnes at elevated temperatures.
- Improved fatigue properties.

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

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.53	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.67E+6	psi	ISO 527-1/1
Tensile Stress	26100	psi	ISO 527-2
Tensile Strain (Yield)	2.1	%	ISO 527-2/50
Flexural Modulus [2]	1.31E+6	psi	ISO 178
Flexural Stress [3]	37700	psi	ISO 178
Flexural Strain - (Yield) [4]	2.7	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	3.8	ft·lb/in²	ISO 179/1eA
Thermal	**Nominal Value**	**Unit**	**Test Method**
Continuous Use Temperature [5]	500	°F	IEC 60216
Vicat Softening Temperature	617	°F	ISO 306/A
CLTE - Flow	1.2E-5	in/in/°F	ISO 11359-2
Service Temperature - during lifetime max. 200 hr	554	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Insulation Resistance [6]	> 1.0E+12	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
Mold Temperature	356 to 392 °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