LUVOCOM® 1114-0717

LEHVOSS Group - *Polyaryletherketone*

General Information

Product Description

with carbon fibers and PTFE; dark grey

Main Features

- Strong, stiff parts.
- Improved friction and wear behaviour. Optimised for dry running operations.
- High continuous-use temperature.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber		
Additive	• PTFE Lubricant		
Features	• High Heat Resistance • High Stiffness	• High Strength • Low Friction	• Lubricated • Wear Resistant
Appearance	• Dark Grey		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.51	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2.76E+6	psi	ISO 527-1/1
Tensile Stress	26100	psi	ISO 527-2
Tensile Strain (Yield)	1.5	%	ISO 527-2/50
Flexural Modulus [2]	2.03E+6	psi	ISO 178
Flexural Stress [3]	34800	psi	ISO 178
Flexural Strain - (Yield) [4]	2.0	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	5.7	ft·lb/in²	ISO 179/1eA
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	581	°F	ISO 75-2/A
Continuous Use Temperature [5]	491	°F	IEC 60216
Vicat Softening Temperature	608	°F	ISO 306/A
CLTE - Flow	2.8E-6	in/in/°F	ISO 11359-2
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	< 1.0E+4	ohms	IEC 62631-3-2
Insulation Resistance [6]	< 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		
Desiccant Dryer, A	302	°F
Desiccant Dryer, B	248	°F
Drying Time		
Desiccant Dryer, A	4.0 to 6.0	hr

Desiccant Dryer, B	6.0 to 10 hr
Rear Temperature	698 to 734 °F
Middle Temperature	716 to 752 °F
Front Temperature	716 to 752 °F
Nozzle Temperature	734 to 770 °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