

LUVOCOM® 1880-8821

LEHVOSS Group - *Liquid Crystal Polymer*

General Information

Product Description

with mineral filler, thermally conductive modified; natural color (beige); reflow (Tm 318°C)

Main Features

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

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.80	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.010	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.89E+6	psi	ISO 527-1/1
Tensile Stress	9860	psi	ISO 527-2
Tensile Strain (Yield)	0.80	%	ISO 527-2/50
Flexural Modulus ²	1.31E+6	psi	ISO 178
Flexural Stress ³	10000	psi	ISO 178
Flexural Strain - (Yield) ⁴	0.80	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength	3.8	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	464	°F	ISO 75-2/A
Continuous Use Temperature ⁵	374	°F	IEC 60216
Thermal Conductivity ⁶	62	Btu·in/hr/ft ² /°F	ISO 22007
Service Temperature - during lifetime max. 200 hr	446	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+14	ohms	IEC 62631-3-2
Insulation Resistance ⁷	> 1.0E+14	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	266 to 302	°F
Vacuum Dryer, B	302	°F
Drying Time		
Desiccant Dryer, A	3.0 to 5.0	hr
Vacuum Dryer, B	4.0 to 5.0	hr
Rear Temperature	554 to 626	°F



Middle Temperature	590 to 644 °F
Front Temperature	608 to 644 °F
Nozzle Temperature	572 to 608 °F
Processing (Melt) Temp	626 °F
Mold Temperature	248 to 302 °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

