

LUVOCOM® 1880-50629/BK

 LEHVOSS Group - *Liquid Crystal Polymer*
General Information
Product Description

with mineral filler, thermally conductive modified; black

Main Features

- Strong, stiff parts.
- High dimensionally stable precision parts, even at elevated temperatures and narrow tolerance range.
- Especially suitable for thin wall complex parts.
- Thermally conductive.

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
Uses	• Thin-walled Parts		
Appearance	• Black		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.69	g/cm ³	ISO 1183
Molding Shrinkage			DIN 16742
Across Flow	0.50 to 0.70	%	
Flow	0.0 to 0.10	%	
Water Absorption (24 hr, 73°F)	< 0.010	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.31E+6	psi	ISO 527-1/1
Tensile Stress	13800	psi	ISO 527-2
Tensile Strain (Yield)	2.5	%	ISO 527-2/50
Flexural Modulus ²	1.35E+6	psi	ISO 178
Flexural Stress ³	16700	psi	ISO 178
Flexural Strain - (Yield) ⁴	2.9	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	2.1	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength	17	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	424	°F	ISO 75-2/A
Thermal Conductivity			ISO 22007
-- ⁵	2.1	Btu·in/hr/ft ² /°F	
-- ⁶	15	Btu·in/hr/ft ² /°F	
Service Temperature - during lifetime max. 200 hr	446	°F	
Electrical	Nominal Value	Unit	Test Method
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	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	590 to 635 °F
Middle Temperature	599 to 644 °F
Front Temperature	608 to 644 °F
Nozzle Temperature	590 to 635 °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 through plane; hot disk

⁶ in plane; hot disk

⁷ strip electrode R25

