LUVOCOM® 1880-8821

Liquid Crystal Polymer

Lehmann & Voss & Co.

Message:

LUVOCOM®1880-8821 is a liquid crystal polymer (LCP) material, which contains mineral fillers. This product is available in Europe.
LUVOCOM®The main features of 1880-8821 are:
Conductivity
Good dimensional stability
Good stiffness
Typical application areas include:
Electrical/electronic applications
engineering/industrial accessories
Aerospace
medical/health care

General Information			
Filler / Reinforcement	Mineral filler		
Features	Good dimensional stability Heat conduction Rigid, good Good strength		
Uses	Electrical/Electronic Applications Engineering accessories Aerospace applications Medical/nursing supplies		
Appearance	Natural color		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.80	g/cm³	ISO 1183
Molding Shrinkage	0.0 - 0.10	%	DIN 16901
Water Absorption (23°C, 24 hr)	< 0.010	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	11000	MPa	ISO 527-2
Tensile Stress (Break)	48.0	MPa	ISO 527-2
Tensile Strain (Yield)	0.60	%	ISO 527-2
Flexural Modulus	9000	MPa	ISO 178
Flexural Stress	69.0	MPa	ISO 178
Flexural Strain at Flexural Strength	0.80	%	ISO 178
Maximum operating temperature-Short Term	230	°C	
Insulation Resistance	> 1.0E+14	ohms	IEC 60167
Impact	**Nominal Value**	**Unit**	**Test Method**

Charpy Unnotched Impact Strength (23°C)	8.0	kJ/m²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (1.8 MPa, Unannealed)	240	°C	ISO 75-2/A
Continuous Use Temperature	190	°C	UL 746B
Thermal Conductivity [1]	9.0	W/m/K	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+14	ohms	IEC 60093
Injection	**Nominal Value**	**Unit**	
Drying Temperature			
A	130 - 150	°C	
Vacuum dryer, B	150	°C	
Drying Time			
A	3.0 - 5.0	hr	
Vacuum dryer, B	4.0 - 5.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	290 - 330	°C	
Middle Temperature	310 - 340	°C	
Front Temperature	320 - 340	°C	
Nozzle Temperature	300 - 320	°C	
Processing (Melt) Temp	320	°C	
Mold Temperature	90.0 - 130	°C	

Injection instructions

General
In general LUVOCOM® can be processed on conventional injection moulding machines while observing the usual technical guidelines.
Any added fibrous materials or fillers may have an abrasive effect. In this case the cylinder and screw should be protected against wear as is usual in the processing of reinforced thermoplastic materials.
Lengthy dwell times for the melts in the cylinder should be avoided.
Lower the temperatures during interruptions!
Predrying (optional)
It is advisable to predry the granulate with a suitable dryer immediately before processing.
The granulate may absorb moisture from the air.
Delivery Form & Storage
Unless indicated otherwise, the material is delivered as 3mm-long pellets in sealed bags on pallets.
Preferably storage should be effected in dry and normally temperatured rooms
Additional Information
During processing the moisture level should not exceed 0.02%, otherwise molecular degradation and surface defects (e.g. smearing) may occur. As the material absorbs water very quickly, the predried material should be fed to the processing immediately. Processing temperatures above 300°C may very rapidly cause thermal damage and should therefore be avoided.
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.

NOTE

1.	Hot-Disk, 60x60x3 mm

Recommended distributors for this material

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