LUVOCOM® 1/XCF/20

Polyamide 66

Lehmann & Voss & Co.

Message:

LUVOCOM® 1/XCF/20 is a polyamide 66 (nylon 66) material, which contains a 20% carbon fiber reinforced material. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.

LUVOCOM® The main features of 1/XCF/20 are:

Conductivity

High stiffness

high strength

Electrostatic protection

anti-warping

Typical application areas include:

engineering/industrial accessories

textile/fiber

Automotive Industry

business/office supplies

General Information					
Filler / Reinforcement	Carbon fiber reinforced material, 20% filler by weight				
Additive	heat stabilizer				
Features	Good dimensional stability				
	Conductivity				
	Low warpage				
	Rigidity, high				
	High strength				
	Electrostatic discharge protection				
	Thermal Stability				
Uses	Gear				
	Textile applications				
	Engineering accessories				
	Application in Automobile Field				
	Business equipment				
	Cam				
Appearance	Natural color				
Physical	Nominal Value	Unit	Test Method		
Density	1.23	g/cm³	ISO 1183		
Molding Shrinkage	0.20 - 0.50	%	DIN 16901		
Water Absorption (23°C, 24 hr)	< 1.0	%			
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus	20000	MPa	ISO 527-2		
Tensile Stress (Break)	290	MPa	ISO 527-2		

Tensile Strain (Yield)	2.7	%	ISO 527-2
Flexural Modulus	17000	MPa	ISO 178
Flexural Stress	415	MPa	ISO 178
Flexural Strain at Flexural Strength	3.4	%	ISO 178
Maximum operating temperature-Short Term	160	°C	
Insulation Resistance		ohms	IEC 60167
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	10	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	88	kJ/m²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	250	°C	ISO 75-2/A
Continuous Use Temperature	120	°C	UL 746B
CLTE - Flow	1.5E-5	cm/cm/°C	DIN 53752
Thermal Conductivity	0.50	W/m/K	DIN 52612
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+5	ohms	IEC 60093
Injection	Nominal Value	Unit	
Drying Temperature			
Hot air dryer, A	75.0	°C	
Vacuum dryer, B			
•	105	°C	
Drying Time	105	°€	
	6.0 - 16	°C hr	
Drying Time			
Drying Time Hot air dryer, A	6.0 - 16	hr	
Drying Time Hot air dryer, A Vacuum dryer, B	6.0 - 16 4.0 - 6.0	hr hr	
Drying Time Hot air dryer, A Vacuum dryer, B Suggested Max Moisture	6.0 - 16 4.0 - 6.0 0.10	hr hr %	
Drying Time Hot air dryer, A Vacuum dryer, B Suggested Max Moisture Rear Temperature	6.0 - 16 4.0 - 6.0 0.10 290 - 310	hr hr %	
Drying Time Hot air dryer, A Vacuum dryer, B Suggested Max Moisture Rear Temperature Middle Temperature	6.0 - 16 4.0 - 6.0 0.10 290 - 310 290 - 310	hr hr % °C °C	
Drying Time Hot air dryer, A Vacuum dryer, B Suggested Max Moisture Rear Temperature Middle Temperature Front Temperature	6.0 - 16 4.0 - 6.0 0.10 290 - 310 290 - 310 290 - 310	hr hr % °C °C °C	

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 0.1%, otherwise molecular degradation and surface defects (e.g. smearing) may occur. Due to rapid absorption of water, originally sealed containers should only be opened immediately prior to processing. Excessively high predrying temperatures may cause discoloration.

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.

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co., Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

