# LUVOCOM® 7/CF/30/BK

## Polyamide 610

Lehmann & Voss & Co.

### Message:

LUVOCOM®7/CF/30/BK is a polyamide 610 (nylon 6/10) material, which contains a 30% 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 7/CF/30/BK are: Conductivity High stiffness high strength Electrostatic protection Good dimensional stability Typical application areas include: engineering/industrial accessories textile/fiber Automotive Industry business/office supplies Handle

Filler / Reinforcement   Carbon fiber reinforced material, 30% filler by weight     Features   Good dimensional stability     Conductivity   Rigidity, high     High strength   Electrostatic discharge protection     Low or no water absorption   Low or no water absorption     Uses   Handle     Textile applications   Engineering accessories     Machine/mechanical parts   Application in Automobile Field     Business equipment   Bearing     Physical   Nominal Value   Unit     Polising Shrinkage   0.10 - 0.40   %     Mathine/Machine/   %   DIN 16901     Water Absorption (23°C, 24 hr)   < 0.15   %     Machine/   Vinit   Test Method     Tensile Modulus   20000   MPa   150 527-2	General Information					
ConductivityRigidity, highHigh strengthElectrostatic discharge protectionLow or no water absorptionUsesHandleTextile applicationsEngineering accessoriesMachine/mechanical partsApplication in Automobile FieldBusiness equipmentBearingPhysicalNominal ValueUnitText MathedMolding Shrinkage0.10 - 0.40%Water Absorption (23°C, 24 hr)< 0.15	Filler / Reinforcement	Carbon fiber reinforced material, 30% filler by weight				
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MechanicalNominal ValueUnitTest MethodTensile Modulus20000MPaISO 527-2	Molding Shrinkage	0.10 - 0.40	%	DIN 16901		
Tensile Modulus 20000 MPa ISO 527-2	Water Absorption (23°C, 24 hr)	< 0.15	%			
	Mechanical	Nominal Value	Unit	Test Method		
Tancila Strace (Brook) 210 MBa ISO 527 2	Tensile Modulus	20000	MPa	ISO 527-2		
rensite stress (break) 210 IVIPa ISU 52/-2	Tensile Stress (Break)	210	MPa	ISO 527-2		

Tensile Strain (Yield)	2.0	%	ISO 527-2
Flexural Modulus	16000	MPa	ISO 178
Flexural Stress	305	MPa	ISO 178
Coefficient of Friction			
Dynamic	0.26		
Static	0.20		
Flexural Strain at Flexural Strength	2.6	%	ISO 178
Maximum operating temperature-Short Term	140	°C	
Insulation Resistance		ohms	IEC 60167
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	10	kJ/m²	ISO 179/1eA
23°C	14	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength			
-30°C	60	kJ/m²	ISO 179/1fU
23°C	50	kJ/m²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	205	°C	ISO 75-2/A
Continuous Use Temperature	90.0	°C	UL 746B
CLTE - Flow	1.6E-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+2	ohms	IEC 60093
Injection	Nominal Value	Unit	
Drying Temperature			
A	75.0	°C	
В	105	°C	
Drying time-A	6.0 - 10	hr	
Suggested Max Moisture	0.10	%	
Rear Temperature	240 - 270	°C	
Middle Temperature	260 - 280	°C	
Front Temperature	270 - 290	°C	
Nozzle Temperature	270 - 290	°C	
Processing (Melt) Temp	265	°C	
Mold Temperature	70.0 - 100	°C	
Molu Temperature	70.0 - 100		

#### 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. As the material absorbs water very rapidly, originally sealed containers should only be opened immediately before 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.

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