

# LUVOCOM® 50/CF/7/GS/10/TF/5/EM/BK

Polycarbonate  
Lehmann & Voss & Co.

Message:

LUVOCOM® 50/CF/7/GS/10/TF/5/EM/BK is a polycarbonate (PC) material, which contains 10% glass flakes and 7.0% carbon fiber reinforced materials. This product is available in North America, Africa and the Middle East, Latin America, Europe or Asia Pacific.

LUVOCOM®The main characteristics of 50/CF/7/GS/10/TF/5/EM/BK are:

- flame retardant/rated flame
- Conductivity
- High stiffness
- high strength
- Electrostatic protection

Typical application areas include:

- engineering/industrial accessories
- business/office supplies
- Sporting goods
- medical/health care

General Information			
Filler / Reinforcement	Glass flake, 10% filler by weight		
	Carbon fiber reinforced material, 7.0% filler by weight		
Additive	PTFE lubricant (5%)		
Features	Good dimensional stability		
	Conductivity		
	Low friction coefficient		
	Rigidity, high		
	High strength		
	Electrostatic discharge protection		
	Good liquidity		
	Good wear resistance		
	Lubrication		
Uses	Gear		
	Engineering accessories		
	Business equipment		
	Sporting goods		
	Medical/nursing supplies		
Appearance	Black		
Physical	Nominal Value	Unit	Test Method
Density	1.33	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage	0.30 - 0.50	%	DIN 16901
Water Absorption (23°C, 24 hr)	< 0.20	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	6000	MPa	ISO 527-2
Tensile Stress (Break)	90.0	MPa	ISO 527-2
Tensile Strain (Yield)	3.0	%	ISO 527-2
Flexural Modulus	5000	MPa	ISO 178
Flexural Stress	130	MPa	ISO 178
Coefficient of Friction			
Dynamic	0.26		
Static	0.22		
Flexural Strain at Flexural Strength	4.0	%	ISO 178
Maximum operating temperature-Short Term	150	°C	
Insulation Resistance		ohms	IEC 60167
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C	10	kJ/m <sup>2</sup>	ISO 179/1eA
23°C	13	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1fU
-30°C	25	kJ/m <sup>2</sup>	ISO 179/1fU
23°C	30	kJ/m <sup>2</sup>	ISO 179/1fU
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature	130	°C	UL 746B
Vicat Softening Temperature	160	°C	ISO 306/A
CLTE - Flow	4.5E-5	cm/cm/°C	DIN 53752
Thermal Conductivity	0.30	W/m/K	DIN 52612
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+7	ohms	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating	V-1		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	4.0 - 6.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	280 - 300	°C	
Middle Temperature	290 - 310	°C	
Front Temperature	300 - 320	°C	
Nozzle Temperature	290 - 310	°C	
Processing (Melt) Temp	295	°C	
Mold Temperature	80.0 - 120	°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 may occur.

Suitable heat treatment may increase resistance to the formation of stress cracks.

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

