# **LUVOCOM® 1301/CF/20**

## Polyphenylene Sulfide

## **LEHVOSS Group**

### Message:

LUVOCOM® 1301/CF/20 is a polyphenylene sulfide (PPS) material, and the filler is 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 1301/CF/20 are:

flame retardant/rated flame

Conductivity

Flame Retardant

High stiffness

high strength

Typical application areas include:

textile/fiber

engineering/industrial accessories

**Automotive Industry** 

business/office supplies

medical/health care

General Information					
Filler / Reinforcement	Carbon fiber reinforced material, 20% filler by weight				
Features	Conductivity				
	Rigidity, high				
	High strength				
	Static conduction				
	Good creep resistance				
	Heat resistance, high				
	Flame retardancy				
Uses	Textile applications				
	Engineering accessories				
	Application in Automobile Field				
	Business equipment				
	Medical/nursing supplies				
Appearance	Natural color				
Physical	Nominal Value	Unit	Test Method		
Density	1.41	g/cm³	ISO 1183		
Molding Shrinkage	0.10 - 0.30	%	DIN 16901		
Water Absorption (23°C, 24 hr)	< 0.050	%			
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus	17000	MPa	ISO 527-2		
Tensile Stress (Break)	180	MPa	ISO 527-2		
Tensile Strain (Yield)	1.5	%	ISO 527-2		

Flexural Modulus	16000	MPa	ISO 178
Flexural Stress	250	MPa	ISO 178
Flexural Strain at Flexural Strength	2.0	%	ISO 178
Maximum operating temperature-Short Term	240	°C	
Insulation Resistance		ohms	IEC 60167
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength (23°C)	18	kJ/m²	ISO 179/1fU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	260	°C	ISO 75-2/A
Continuous Use Temperature	220	°C	UL 746B
Vicat Softening Temperature	255	°C	ISO 306/A
CLTE - Flow	1.4E-5	cm/cm/°C	DIN 53752
Thermal Conductivity <sup>1</sup>	1.1	W/m/K	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+3	ohms	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating <sup>2</sup>	V-0		UL 94
Injection	Nominal Value	Unit	
Drying Temperature			
Hot air dryer	100 - 140	°C	
Hot air dryer, B	50 - 90	°C	
Drying Time			
Hot air dryer	2.0 - 4.0	hr	
Hot air dryer, B	> 4.0	hr	
Rear Temperature	300 - 320	°C	
Middle Temperature	310 - 330	°C	
Front Temperature	320 - 340	°C	
Nozzle Temperature	320 - 340	°C	
Processing (Melt) Temp	330	°C	
Mold Temperature	150 - 180	°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

The material does not necessarily have to be predried; when originally sealed containers are used, this process may normally be omitted. Processing temperatures above 360°C may very rapidly cause thermal damage and should therefore be avoided.

Post-crystallization may lead to warpage at elevated operating temperatures. This can be counteracted by suitable heat treatment.

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.

High-temperature polymers place increased demands on the tool steels employed.

Please contact us for further information.

NOTE	
1.	Hot-Disk, 60x60x3 mm
2.	Not recognized by UL.

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

