PRELIMINARY DATASHEET

LUVOCOM® 3F PP CF 9928 BK

LUVOCOM® 3F
Additive manufacturing solutions

Polypropylene-copolymer with carbon fibers, black

Physical properties		Test method	Specimen	Units	Typical value
Specific gravity		ISO 1183-3		g/cm³	1,00
Water absorption	23°C / 24h	ISO 62	MPTS ISO 3167 A	%	<0,3
Linear mould shrinkage		DIN 16742	MPTS ISO 3167 A	%	0,2-0,6
Mechanical properties at 23°C / 50% rh					
Tensile strength	dry, @50 mm/min	ISO 527	MPTS ISO 3167 A	MPa	54
Elongation at maximum force	dry, @50 mm/min	ISO 527	MPTS ISO 3167 A	%	1,2
Modulus of elasticity	dry, @1 mm/min	ISO 527	MPTS ISO 3167 A	GPa	7
Flexural strength	dry, @10 mm/min	ISO 178	MPTS ISO 3167 A	MPa	78
Flexural elongation at max. force	dry, @10 mm/min	ISO 178	MPTS ISO 3167 A	%	1,5
Flexural modulus	dry, @2 mm/min	ISO 178	MPTS ISO 3167 A	GPa	6
Charpy impact strength	dry	ISO 179 1eU	80x10x4mm	kJ/m²	35
Thermal properties					
Vicat softening temp	VST A	DIN ISO 306	MPTS ISO 3167 A	°C	80
Continuous service temperature	20.000 h	IEC 60216	MPTS ISO 3167 A	°C	100
Service temperature	during lifetime max. 200h		MPTS ISO 3167 A	°C	130
Electrical properties					
Insulation resistance strip electrode	R25	DIN IEC 60167	MPTS ISO 3167 A	Ω	10^{1-7}
Surface resistance	ROB	DIN IEC 60093	Ronde 60x4mm	Ω	$\leq 10^{7}$

Main features

Strong, stiff parts. Electrically conductive, suitable for continuous discharging of statically-generated electricity. Low warpage.

2020091917294

PRELIMINARY DATASHEET

LUVOCOM® 3F PP CF 9928 BK

LUVOCOM® 3F
Additive manufacturing solutions

Polypropylene-copolymer with carbon fibers, black

Recommended processing parameters

Predrying		
It is advisable to predry the granulate with a suitable dryer immediately before processing. The granulate may absorb moisture from the environment.		
Dryer type	Temperature °C	Drying time in h
Dehumidifying dryer	70 - 95	2 - 4
Processing		
Zone 1	°C	220 - 250
Zone 2	°C	220 - 250
Zone 3	°C	230 - 260
Nozzle	°C	220 - 250
Mold	°C	40 - 80
Melt temperature	°C	230 - 60
In general this product 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!		
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 content should not exceed 0.2%. Moisture may lead to smearing and in extreme cases to foaming. Usually the material can be processed over a broad temperature range and can thus be adapted to a wide variety of processing conditions. 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.		

09928 30 07 18

Europe and Head Office
Lehmann&Voss&Co. KG
Alsterufer 19
20354 Hamburg
Germany
Tel +49 40 44 197-0
Email: luvocom@lehvoss.de

North America
LEHVOSS North America, LLC
185 South Broad Street
Pawcatuck, CT 06379
USA
Tel +1-855-681-3226
Email: info@lehvoss.us

Asia
LEHVOSS (Shanghai) Chemical Trading Co., Ltd.
Unit 4805, 8 Xingyi Road
Changning District, Shanghai 200336
China
Tel +86 21 62785181
Email: info@lehvoss.cn

LEHVOSS Group

2020091917294