HK:+852-69575415 China GuangDong:+13538586433 ShangHai:+18816996168

LUVOCOM® 70-9113/BK

LUVOCOM
High-performance compounds

Polyketone
with PTFE, lubricant modified, easy flowing, demolding aid, black

Physical properties		Test method	Specimen	Units	Typical value
Specific gravity		ISO 1183-3		g/cm³	1,28
Water absorption	23°C / 24h	ISO 62	ISO 3167 A	%	0,15
Melt volume rate (MVR)		250°C / 2,16kg	pellet	cm³/10 min	30
Linear mould shrinkage		DIN 16742	ISO 3167 A	%	1,6-2,2
Mechanical properties at 23°C / 50% rh					
Tensile strength	dry, @50 mm/min	ISO 527	ISO 3167 A	MPa	57
Elongation @Fmax.	dry, @50 mm/min	ISO 527	ISO 3167 A	%	18
Tensile modulus	dry, @1 mm/min	ISO 527	ISO 3167 A	GPa	1,5
Flexural strength	dry, @10 mm/min	ISO 178	ISO 3167 A	MPa	68
Flexural modulus	dry, @2 mm/min	ISO 178	ISO 3167 A	GPa	1,5
Impact strength	dry	ISO 179 1fU	80x10x4mm	kJ/m²	75
Impact strength, notched	dry	ISO 179 1eA	80x10x4mm	kJ/m²	8
Thermal properties					
Vicat softening temp.	VST A	DIN ISO 306	ISO 3167 A	°C	200
Heat distortion temp.	HDT A	ISO 75	80x10x4mm	°C	100
Continuous service temp.	20.000 h	IEC 60216	ISO 3167 A	°C	90
Service temperature	during lifetime max. 200h		ISO 3167 A	°C	120
Electrical properties					
Insulation resistance	strip electrode R25	DIN EN 62631-3-3	ISO 3167 A	Ω	≥10^{12}
Surface resistance	ROB	DIN EN 62631-3-2	Ronde 60x4mm	Ω	≥10^{12}

Main features

Improved friction and wear behaviour. Optimised for dry running operations. Sliding-couples with a low friction coefficient. Chemically- and hydrolytically- resistant parts.

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Recommended processing parameters

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.

Predrying

Due to moisture absorption from the environment, pre-drying of the material is recommended. Moisture could lead to molecular degradation and surface defects (e.g. smearing). Excessively high predrying temperatures may cause discoloration. Recommended moisture content before processing: <0.02%

Dryer type	Temperature °C	Drying time in h
Dehumidifying dryer	120	1 - 4
or	80	2 - 6

Recommended processing parameters

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!

Mold	Melt temperature	Nozzle	Zone 3	Zone 2	Zone 1
60 - 100 °C	235 °C	230 - 245 °C	220 - 240 °C	220 - 240 °C	220 - 235 °C

Additional information

Processing temperatures should be kept below 240 °C and not exceed 270 °C, otherwise thermal degradation may occur. High shear during metering should be avoid. Before and after processing, the machine must be purged with polyolefins. Contamination by POM or polyamides can produce spontaneous cross-linking reactions. 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.

LEHVOSS Group