## PRELIMINARY DATASHEET

# LUVOCOM® 3F PEI 50236 GY



Polyetherimide unreinforced, grey

Meets EN 45545

Physical properties		Test method	Specimen	Units	Typical value
Specific gravity		ISO 1183		g/cm³	1,38
Water absorption	23°C / 24h	ISO 62	ISO 3167 A	%	<0,3
Linear mould shrinkage		DIN 16742	ISO 3167 A	%	0,2-0,5
Mechanical properties at 23°C / 50% rh					
Tensile strength	dry, @50 mm/min	ISO 527	ISO 3167 A	MPa	105
Elongation @Fmax.	dry, @50 mm/min	ISO 527	ISO 3167 A	%	4,5
Elongation at break	dry, @50 mm/min	ISO 527	ISO 3167 A	%	5
Tensile modulus	dry, @1 mm/min	ISO 527	ISO 3167 A	GPa	3,5
Thermal properties					
Heat distortion temp.	HDT A	ISO 75	80x10x4mm	°C	200
Continuous service temp.	20.000 h	IEC 60216	ISO 3167 A	°C	170
Electrical properties					
Insulation resistance	strip electrode R25	DIN EN 62631-3-3	ISO 3167 A	Ω	>1012
Surface resistance	ROB	DIN EN 62631-3-2	Ronde 60x4mm	Ω	>1012

## **Main features**

High dimensionally stable precision parts. Meets EN 45545.

# LUVOCOM® 3F PEI 50236 GY



Polyetherimide unreinforced, grey

Meets EN 45545

# Recommended processing parameters

#### General

3D Printing parameters may vary from machine to machine. The following settings may be used as an indication: nozzle temperature: 400 - 450 °C / nozzle material: abrasion resistant / print bed temperature: > 120 °C / layer thickness: > 0,15mm / printing speed 40 - 60 mm/s. 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.

## **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**

It is advisable to predry the granules with a suitable dryer immediately before processing. The granule may absorb moisture from the environment.

Dryer type	Temperature °C	Drying time in h
Dehumidifying dryer	120	> 8
or	150	> 4

# Recommended processing parameters

In general LUVOCOM® 3F can be processed on conventional extrusion machines while observing the usual technical guidelines. Any added fibrous materials or fillers may have an abrasive effect. In this case the cylinder, screw and die 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	Nozzle	Zone 3	Zone 2	Zone 1
150 - 180 °C	350 - 400 °C	350 - 400 °C	340 - 390 °C	330 - 350 °C

#### **Additional information**

During processing the moisture level should not exceed 0.03%, otherwise porosity and surface defects (e.g. smearing) may occur. Predrying is recommended even when sealed original containers are being used.

50236 13 05 20

#### **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 Inc. 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

