

LUVOCOM® 80/CF/12/TF/10/BK 100

LEHVOSS Group - Acetal (POM) Copolymer

General Information
Product Description

with carbon fibers and PTFE; natural color (black)

Main Features

- Improved friction and wear behaviour. Optimised for dry running operations.
- Strong, stiff parts.
- Electrically conductive, suitable for continuous discharging of statically-generated electricity.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber		
Additive	• PTFE Lubricant		
Features	• Electrically Conductive	• High Strength	• Lubricated
	• High Stiffness	• Low Friction	• Wear Resistant
Appearance	• Black		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.50	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/5.0 kg)	12	cm ³ /10min	ISO 1133
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.60E+6	psi	ISO 527-1/1
Tensile Stress	13800	psi	ISO 527-2
Tensile Strain (Yield)	1.1	%	ISO 527-2/50
Flexural Modulus ²	1.23E+6	psi	ISO 178
Flexural Stress ³	19600	psi	ISO 178
Flexural Strain - (Yield) ⁴	1.5	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength	8.6	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	266	°F	ISO 75-2/A
Continuous Use Temperature ⁵	212	°F	IEC 60216
Vicat Softening Temperature	320	°F	ISO 306/A
CLTE - Flow	3.3E-5	in/in/°F	ISO 11359-2
Service Temperature - during lifetime max. 200 hr	248	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+3	ohms	IEC 62631-3-2
Insulation Resistance ⁶	< 1.0E+3	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Circulation Dryer, B	248	°F
Desiccant Dryer, A	167	°F
Drying Time		
Circulation Dryer, B	2.0 to 4.0	hr



Desiccant Dryer, A	2.0 to 8.0 hr
Rear Temperature	347 to 374 °F
Middle Temperature	365 to 401 °F
Front Temperature	356 to 392 °F
Nozzle Temperature	347 to 392 °F
Processing (Melt) Temp	392 °F
Mold Temperature	176 to 248 °F

Injection Notes

Avoid melt temperature above 215°C! Ventilation of machinery is recommended.

During processing, the moisture level should not exceed 0.01%, otherwise molecular degradation may occur. As the material absorbs water very quickly, the predried material should be fed to the processing immediately. 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.

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 0.39 in/min

⁴ 10 mm/min

⁵ 20,000 hr

⁶ strip electrode R25

