

LUVOCOM® 20-0778

LEHVOSS Group - Polyphthalamide

General Information
Product Description

with glass fibers and PTFE; natural color (beige)

Main Features

- Electrically conductive, suitable for continuous discharging of statically-generated electricity.
- Strong, stiff parts.
- Improved friction and wear behaviour. Optimised for dry running operations.
- Low influence from moisture and temperature on dimensional stability and electrical properties, compared with PA66.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber		
Additive	• PTFE Lubricant		
Features	• Electrically Conductive • Good Dimensional Stability • Good Electrical Properties • Good Heat Resistance	• High Stiffness • High Strength • Low Friction • Low Moisture Absorption	• Lubricated • Wear Resistant
Appearance	• Beige		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.55	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.74E+6	psi	ISO 527-1/1
Tensile Stress	30500	psi	ISO 527-2
Tensile Strain (Yield)	2.3	%	ISO 527-2/50
Flexural Modulus ²	1.60E+6	psi	ISO 178
Flexural Stress ³	45000	psi	ISO 178
Flexural Strain - (Yield) ⁴	3.5	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	5.7	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
--	24	ft·lb/in ²	
-22°F	32	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	518	°F	ISO 75-2/A
Continuous Use Temperature ⁵	329	°F	IEC 60216
Vicat Softening Temperature	563	°F	ISO 306/A
CLTE - Flow	1.4E-5	in/in/°F	ISO 11359-2
Service Temperature - during lifetime max. 200 hr	383	°F	
Electrical	Nominal Value	Unit	Test Method
Insulation Resistance ⁶	> 1.0E+12	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer A		176 °F



Vacuum Dryer, B	221 °F
Drying Time	
Desiccant Dryer, A	6.0 to 16 hr
Vacuum Dryer, B	4.0 to 5.0 hr
Rear Temperature	608 to 644 °F
Middle Temperature	608 to 653 °F
Front Temperature	617 to 662 °F
Nozzle Temperature	608 to 626 °F
Processing (Melt) Temp	626 °F
Mold Temperature	275 to 320 °F

Injection Notes

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

