

LUVOCOM® 20-7796

LEHVOSS Group - Polyphthalamide

General Information

Product Description

with aramid reinforcement and PTFE; natural color (yellow)

Main Features

- Low influence from moisture and temperature on dimensional stability and electrical properties, compared with PA66.
- Improved friction and wear behaviour. Optimised for dry running operations.
- Suitable for metal inserts.

General

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

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.26	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	580000	psi	ISO 527-1/1
Tensile Stress	11600	psi	ISO 527-2
Tensile Strain (Yield)	2.8	%	ISO 527-2/50
Flexural Modulus ²	493000	psi	ISO 178
Flexural Stress ³	16700	psi	ISO 178
Flexural Strain - (Yield) ⁴	3.8	%	ISO 178
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature ⁵	329	°F	IEC 60216
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

