LUVOCOM® 1850-7784

LEHVOSS Group - *Polybutylene Terephthalate*

General Information

Product Description

with glass fibers, glass spheres and PTFE; black

Main Features

- Improved friction and wear behaviour. Optimised for dry running operations.
- High dimensionally stable precision parts with low warpage and narrow tolerance range.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Bead	• Glass Fiber	
Additive	• PTFE Lubricant		
Features	• High Dimensional Stability • Low Friction	• Low Warpage • Lubricated	• Wear Resistant
Appearance	• Black		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.61	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	667000	psi	ISO 527-1/1
Tensile Stress	7980	psi	ISO 527-2
Tensile Strain (Yield)	2.7	%	ISO 527-2/50
Flexural Modulus [2]	580000	psi	ISO 178
Flexural Stress [3]	12000	psi	ISO 178
Flexural Strain - (Yield) [4]	3.5	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength	12	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Continuous Use Temperature [5]	266	°F	IEC 60216
Service Temperature - during lifetime max. 200 hr	356	°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	248	°F
Vacuum Dryer, B	176	°F
Drying Time		
Desiccant Dryer, A	4.0 to 6.0	hr
Vacuum Dryer, B	6.0 to 8.0	hr
Rear Temperature	464 to 500	°F
Middle Temperature	500 to 536	°F
Front Temperature	482 to 518	°F
Nozzle Temperature	482 to 509	°F
Processing (Melt) Temp	482	°F

Mold Temperature	140 to 248 °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