LUVOCOM® 1850/GF/30/TF/13/SI/2/BK

LEHVOSS Group - *Polybutylene Terephthalate*

General Information

Product Description

with glass fibers, PTFE lubricant modified; black

Main Features

- Strong, stiff parts.
- Improved friction and wear behaviour. Optimised for dry running operations.

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

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.63	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.45E+6	psi	ISO 527-1/1
Tensile Stress	17400	psi	ISO 527-2
Tensile Strain (Yield)	2.4	%	ISO 527-2/50
Flexural Modulus [2]	1.38E+6	psi	ISO 178
Flexural Stress [3]	26100	psi	ISO 178
Flexural Strain - (Yield) [4]	3.5	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
--	4.8	ft·lb/in²	
-22°F	4.8	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
--	24	ft·lb/in²	
-22°F	27	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ISO 75-2/A
Continuous Use Temperature [5]	266	°F	IEC 60216
Vicat Softening Temperature	410	°F	ISO 306/A
CLTE - Flow	1.3E-5	in/in/°F	ISO 11359-2
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