LUVOCOM® 1700-7859

LEHVOSS Group - *Polyphenylene Ether + PS*

General Information

Product Description

with carbon fiber, glass fiber and PTFE; black

Main Features

- Electrically conductive, suitable for continuous discharging of statically-generated electricity.
- Strong, stiff parts; low thermal coefficient of expansion.
- High dimensionally stable precision parts with low warpage and narrow tolerance range.
- 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	• Carbon Fiber	• Glass Fiber	
Additive	• PTFE Lubricant		
Features	• Electrically Conductive • High Dimensional Stability • High Stiffness	• High Strength • Low CLTE • Low Friction	• Low Warpage • Lubricated • Wear Resistant
Appearance	• Black		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.35	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.060	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.89E+6	psi	ISO 527-1/1
Tensile Stress	16700	psi	ISO 527-2
Tensile Strain (Yield)	1.5	%	ISO 527-2/50
Flexural Modulus [2]	1.60E+6	psi	ISO 178
Flexural Stress [3]	24700	psi	ISO 178
Flexural Strain - (Yield) [4]	2.0	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	2.9	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength	9.5	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	248	°F	ISO 75-2/A
Continuous Use Temperature [5]	230	°F	IEC 60216
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	< 1.0E+5	ohms	IEC 62631-3-2
Insulation Resistance [6]	< 1.0E+6	ohms	IEC 62631-3-3
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	HB		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer, A	203 to 230	°F
Drying Time - Desiccant Dryer, A	1.0 to 2.0	hr
Rear Temperature	518 to 536	°F
Middle Temperature	518 to 572	°F
Front Temperature	554 to 581	°F

Nozzle Temperature	545 to 563 °F
Processing (Melt) Temp	536 °F
Mold Temperature	158 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