LUVOCOM® 1301/XCF/30/EG

LEHVOSS Group - *Linear Polyphenylene Sulfide*

General Information

Product Description

with carbon fibers; natural color (black)

Main Features

- High continuous-use and heat-distortion temperatures. Non flammable.
- High-strength and stiffness parts with low creep.
- Dynamically-stressed parts.
- Electrically conductive, suitable for continuous discharging of statically-generated electricity.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber		
Features	• Creep Resistant • Electrically Conductive	• High Heat Resistance • High Stiffness	• High Strength • Ignition Resistant
Appearance	• Black		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.45	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.050	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	4.93E+6	psi	ISO 527-1/1
Tensile Stress	39200	psi	ISO 527-2
Tensile Strain (Yield)	1.1	%	ISO 527-2/50
Flexural Modulus [2]	4.35E+6	psi	ISO 178
Flexural Stress [3]	56400	psi	ISO 178
Flexural Strain - (Yield) [4]	1.5	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength	23	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	518	°F	ISO 75-2/A
Continuous Use Temperature [5]	428	°F	IEC 60216
CLTE - Flow	6.1E-6	in/in/°F	ISO 11359-2
Thermal Conductivity [6]	10	Btu·in/hr/ft²/°F	ISO 22007
Service Temperature - during lifetime max. 200 hr	464	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	< 1.0E+3	ohms	IEC 62631-3-2
Insulation Resistance [7]	< 1.0E+3	ohms	IEC 62631-3-3
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	V-0		Internal Method

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
--	122 to 194	°F
Desiccant Dryer, A	212 to 284	°F
Drying Time		

--	> 4.0 hr
Desiccant Dryer, A	2.0 to 4.0 hr
Rear Temperature	572 to 608 °F
Middle Temperature	590 to 626 °F
Front Temperature	608 to 644 °F
Nozzle Temperature	608 to 644 °F
Mold Temperature	302 to 356 °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] in plane; hot disk

[7] strip electrode R25