LUVOCOM® 1100/GF/20/EM/MR

LEHVOSS Group - *Polyethersulfone*

General Information

Product Description

with glass fibers, easy flowing, demolding aid; natural color (beige)

Main Features

- Suitable for parts in contact with drinking water.
- Especially suitable for thin wall complex parts.
- High dimensionally stable precision parts, even at elevated temperatures and narrow tolerance range.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber		
Additive	• Mold Release		
Features	• Drinking Water Contact Acceptable • Good Flow	• High Dimensional Stability • High Heat Resistance	
Uses	• Thin-walled Parts		
Appearance	• Beige		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.51	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.16E+6	psi	ISO 527-1/1
Tensile Stress	19600	psi	ISO 527-2
Tensile Strain (Yield)	2.4	%	ISO 527-2/50
Flexural Modulus [2]	870000	psi	ISO 178
Flexural Stress [3]	21800	psi	ISO 178
Flexural Strain - (Yield) [4]	3.8	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	4.8	ft·lb/in²	ISO 179/1eA
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ISO 75-2/A
Continuous Use Temperature [5]	356	°F	IEC 60216
Vicat Softening Temperature	428	°F	ISO 306/A
CLTE - Flow	1.7E-5	in/in/°F	ISO 11359-2
Service Temperature - during lifetime max. 200 hr	392	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Insulation Resistance [6]	> 1.0E+12	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 - Desiccant Dryer, A	302	°F
Drying Time - Desiccant Dryer, A	3.0 to 5.0	hr
Rear Temperature	671 to 707	°F
Middle Temperature	680 to 716	°F

Front Temperature	662 to 698 °F
Nozzle Temperature	644 to 680 °F
Processing (Melt) Temp	662 °F
Mold Temperature	248 to 392 °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