LUVOCOM® 3-9912

LEHVOSS Group - *Polyamide 6*

General Information

Product Description

with carbon fibers and glass fibers, heat stabilized; black

Main Features

- Electrically conductive, suitable for continuous discharging of statically-generated electricity.
- Strong, stiff parts.
- High dimensionally stable precision parts.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber	• Glass Fiber	
Additive	• Heat Stabilizer		
Features	• Electrically Conductive • Heat Stabilized	• High Dimensional Stability • High Stiffness	• High Strength
Appearance	• Black		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.33	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	< 1.3	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2.76E+6	psi	ISO 527-1/1
Tensile Stress	33400	psi	ISO 527-2
Tensile Strain (Yield)	2.7	%	ISO 527-2/50
Flexural Modulus [2]	2.47E+6	psi	ISO 178
Flexural Stress [3]	48600	psi	ISO 178
Flexural Strain - (Yield) [4]	2.9	%	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	6.2	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength	36	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	392	°F	ISO 75-2/A
Continuous Use Temperature [5]	230	°F	IEC 60216
Vicat Softening Temperature	428	°F	ISO 306/A
Service Temperature - during lifetime max. 200 hr	266	°F	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	< 1.0E+3	ohms	IEC 62631-3-2
Insulation Resistance [6]	< 1.0E+3	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer, A	167	°F
Desiccant Dryer, B	221	°F
Drying Time		
Desiccant Dryer, A	10 to 16	hr
Desiccant Dryer, B	4.0 to 6.0	hr

Rear Temperature	482 to 518 °F
Middle Temperature	518 to 554 °F
Front Temperature	536 to 572 °F
Nozzle Temperature	518 to 536 °F
Mold Temperature	158 to 230 °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