

LUVOCOM® LFT 6-50581CF10NT

LEHVOSS Group - Polyamide 12

General Information

Product Description

with carbon fibers; natural color

Main Features

- Strong, stiff parts.
- Low influence from moisture and temperature on dimensional stability and properties, compared with PA66.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber		
Features	• Good Dimensional Stability • Good Electrical Properties	• Good Heat Resistance • High Stiffness	• High Strength • Low Moisture Absorption
Appearance	• Natural Color		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 1.0	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3.99E+6	psi	ISO 527-1/1
Tensile Stress	38400	psi	ISO 527-2
Tensile Strain (Yield)	1.3	%	ISO 527-2/50
Flexural Modulus ²	3.41E+6	psi	ISO 178
Flexural Stress ³	54400	psi	ISO 178
Flexural Strain - (Yield) ⁴	2.1	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
--	11	ft·lb/in ²	
-22°F	9.0	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
--	29	ft·lb/in ²	
-22°F	24	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	356	°F	ISO 75-2/A
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+2	ohms	IEC 62631-3-2
Insulation Resistance ⁵	< 1.0E+2	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
--	212	°F
Desiccant Dryer, A	176	°F
Drying Time		
--	1.0 to 4.0	hr
Desiccant Dryer, A	1.0 to 4.0	hr
Rear Temperature	500 to 518	°F



Middle Temperature	527 to 545 °F
Front Temperature	536 to 554 °F
Nozzle Temperature	527 to 545 °F
Processing (Melt) Temp	500 °F
Mold Temperature	176 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 strip electrode R25

