

LUVOCOM® 3-9739/BK-1

LEHVOSS Group - Polyamide 6

General Information
Product Description

with carbon fibers, thermally conductive modified; black

Main Features

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

General

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

Properties ¹

Physical	Nominal Value Unit	Test Method
Density	1.33 g/cm ³	ISO 1183
Water Absorption (24 hr, 73°F)	< 1.3 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2.61E+6 psi	ISO 527-1/1
Tensile Stress	20700 psi	ISO 527-2
Tensile Strain (Yield)	1.4 %	ISO 527-2/50
Flexural Modulus ²	2.22E+6 psi	ISO 178
Flexural Stress ³	30000 psi	ISO 178
Flexural Strain - (Yield) ⁴	1.9 %	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Unnotched Impact Strength	14 ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value Unit	Test Method
Continuous Use Temperature ⁵	212 °F	IEC 60216
Vicat Softening Temperature	428 °F	ISO 306/A
Thermal Conductivity ⁶	35 Btu·in/hr/ft ² /°F	ISO 22007
Service Temperature - during lifetime max. 200 hr	284 °F	
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	< 1.0E+2 ohms	IEC 62631-3-2
Insulation Resistance ⁷	< 1.0E+2 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 in plane; hot disk

⁷ strip electrode R25

