

LUVOCOM® 1850-8023

 LEHOSS Group - *Polybutylene Terephthalate*

General Information

Product Description

with carbon fibers; black

Main Features

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

General

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

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.36	g/cm ³	ISO 1183
Molding Shrinkage			DIN 16742
Across Flow	0.50 to 0.90	%	
Flow	0.10 to 0.40	%	
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.89E+6	psi	ISO 527-1/1
Tensile Stress	16700	psi	ISO 527-2
Tensile Strain (Yield)	2.5	%	ISO 527-2/50
Flexural Modulus ²	1.38E+6	psi	ISO 178
Flexural Stress ³	22500	psi	ISO 178
Flexural Strain - (Yield) ⁴	3.0	%	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
Deflection Temperature Under Load (264 psi, Unannealed)	374	°F	ISO 75-2/A
Continuous Use Temperature ⁵	266	°F	IEC 60216
Service Temperature - during lifetime max. 200 hr	320	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 10	ohms	IEC 62631-3-2
Insulation Resistance ⁶	< 10	ohms	IEC 62631-3-3

Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer, A	248	°F
Vacuum Dryer, B	176	°F
Drying Time		
Desiccant Dryer, A	4.0 to 6.0	hr
Vacuum Dryer, B	6.0 to 8.0	hr
Rear Temperature	464 to 500	°F
Middle Temperature	500 to 536	°F



Front Temperature	482 to 518 °F
Nozzle Temperature	482 to 509 °F
Processing (Melt) Temp	482 °F
Mold Temperature	140 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 20,000 hr

⁶ strip electrode R25

