

LUVOCOM® 1850/CF/10/GF/10/BK

 LEHOSS Group - *Polybutylene Terephthalate*
General Information
Product Description

with carbon fibers and glass fibers; black

Main Features

- Strong, stiff, impact-resistant parts.
- Resistant to aliphatic hydrocarbons, oils, greases, dilute acids and alkalis, cleaning solvents and salt solutions.
- Electrically conductive, suitable for continuous discharging of statically-generated electricity.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber	• Glass Fiber	
Features	• Acid Resistant • Alkali Resistant • Electrically Conductive • Grease Resistant	• High Impact Resistance • High Stiffness • High Strength • Hydrocarbon Resistant	• Oil Resistant • Salt Water/Spray Resistant • Solvent Resistant
Appearance	• Black		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	15	cm ³ /10min	ISO 1133
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.39E+6	psi	ISO 527-1/1
Tensile Stress	20200	psi	ISO 527-2
Tensile Strain (Yield)	2.9	%	ISO 527-2/50
Flexural Modulus ²	1.16E+6	psi	ISO 178
Flexural Stress ³	28300	psi	ISO 178
Flexural Strain - (Yield) ⁴	3.5	%	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength	21	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature ⁵	266	°F	IEC 60216
Vicat Softening Temperature	419	°F	ISO 306/A
Service Temperature - during lifetime max. 200 hr	320	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+5	ohms	IEC 62631-3-2
Insulation Resistance ⁶	< 1.0E+5	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

