

**LUVOCOM® 1105-8317/RD**

 LEHOSS Group - *Polyetheretherketone*
**General Information**
**Product Description**

with glass fibers; ruby red

**Main Features**

- Strong, stiff parts.
- Chemically- and hydrolytically- resistant parts, non flammable.
- Low warpage.
- Especially suitable for medical parts, superheated steam sterilizable, hydrolysis resistance.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber		
Features	• Chemical Resistant • High Stiffness • High Strength	• Hydrolysis Resistant • Hydrolytically Stable • Ignition Resistant	• Low Warpage • Steam Sterilizable
Uses	• Medical/Healthcare Applications		
Appearance	• Red		

**Properties <sup>1</sup>**

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density	1.53	g/cm <sup>3</sup>	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
<b>Mechanical</b>			
Tensile Modulus	1.60E+6	psi	ISO 527-1/1
Tensile Stress	20300	psi	ISO 527-2
Tensile Strain (Yield)	1.9	%	ISO 527-2/50
Flexural Modulus <sup>2</sup>	1.31E+6	psi	ISO 178
Flexural Stress <sup>3</sup>	29000	psi	ISO 178
Flexural Strain - (Yield) <sup>4</sup>	2.6	%	ISO 178
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	599	°F	ISO 75-2/A
Continuous Use Temperature <sup>5</sup>	482	°F	IEC 60216
Service Temperature - during lifetime max. 200 hr	536	°F	
<b>Electrical</b>			
Surface Resistivity	> 1.0E+12	ohms	IEC 62631-3-2
Insulation Resistance <sup>6</sup>	> 1.0E+12	ohms	IEC 62631-3-3
<b>Flammability</b>			
Flame Rating (0.06 in)	V-0		Internal Method

**Processing Information**

	Nominal Value	Unit
<b>Injection</b>		
Drying Temperature		
Desiccant Dryer, A	302	°F
Desiccant Dryer, B	248	°F
Drying Time		
Desiccant Dryer, A	3.0 to 6.0	hr
Desiccant Dryer, B	6.0 to 8.0	hr
Rear Temperature	680 to 698	°F



Middle Temperature	716 to 734 °F
Front Temperature	734 to 752 °F
Nozzle Temperature	680 to 716 °F
Processing (Melt) Temp	734 °F
Mold Temperature	338 to 392 °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

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

<sup>3</sup> 0.39 in/min

<sup>4</sup> 10 mm/min

<sup>5</sup> 20,000 hr

<sup>6</sup> strip electrode R25

