

**LUVOCOM® 1105-7678 VP**

LEHOSS Group - Polyetheretherketone

**General Information**
**Product Description**

with carbon fibers, lubricant modified; graphite grey

**Main Features**

- Improved friction and wear behaviour, self-lubricating, for highest tribological requirements.
- Dynamically-stressed parts moving at high velocity.
- Chemically- and hydrolytically- resistant parts, non flammable.
- Strong, stiff parts; low thermal coefficient of expansion.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber		
Additive	• Lubricant		
Features	• Chemical Resistant • High Stiffness • High Strength • Hydrolytically Stable	• Ignition Resistant • Low CLTE • Low Friction • Lubricated	• Self Lubricating • Wear Resistant
Appearance	• Grey		

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

	Nominal Value	Unit	Test Method
<b>Physical</b>			
Density	1.56	g/cm <sup>3</sup>	ISO 1183
Water Absorption (24 hr, 73°F)	< 0.10	%	ISO 62
<b>Mechanical</b>			
Tensile Modulus	2.03E+6	psi	ISO 527-1/1
Tensile Stress	23200	psi	ISO 527-2
Tensile Strain (Yield)	1.5	%	ISO 527-2/50
Flexural Modulus <sup>2</sup>	1.60E+6	psi	ISO 178
Flexural Stress <sup>3</sup>	31200	psi	ISO 178
Flexural Strain - (Yield) <sup>4</sup>	2.0	%	ISO 178
<b>Impact</b>			
Charpy Unnotched Impact Strength	14	ft·lb/in <sup>2</sup>	ISO 179/1eU
<b>Thermal</b>			
Deflection Temperature Under Load (264 psi, Unannealed)	500	°F	ISO 75-2/A
Continuous Use Temperature <sup>5</sup>	482	°F	IEC 60216
Vicat Softening Temperature	563	°F	ISO 306/A
Service Temperature - during lifetime max. 200 hr	536	°F	
<b>Electrical</b>			
Surface Resistivity	< 1.0E+8	ohms	IEC 62631-3-2
Insulation Resistance <sup>6</sup>	< 1.0E+9	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

