

Lehmann & Voss LUVOCOM[®] TPI-0953 Thermoplastic polyimide, with carbon fiber, PTFE, lubricant modified

Category : Polymer , Thermoplastic , Polyimide, Thermoplastic , Thermoplastic Polyimide, Carbon Fiber

Material Notes:

Applications: Automotive industry, textile machinery, apparatus- and precision engineering medical- and electrical enineering, aircraft- and aerospace industry. Very high continuous use and heat distortion temperature. Non flammable. High chemical resistance parts, hydrolysis resistance, non flammable. Improved friction and wear behaviour, self-lubricating, for highest tribologic needs. Bearings, sleeves, control disks, gear wheels, pump impellers, gear parts. Depending on degree of cristallinity short use temperature may reach 320[°]C (tempering). Information provided by Lehmann & Voss & Co.KG

Order this product through the following link:

http://www.lookpolymers.com/polymer_Lehmann-Voss-LUVOCOM-TPI-0953-Thermoplastic-polyimide-with-carbon-fiber-PTFE-lubricant-modified.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.46 g/cc	1.46 g/cc	ISO 1183
Water Absorption	<= 0.10 %	<= 0.10 %	23 [°] C/24h
Linear Mold Shrinkage	0.0020 - 0.0040 cm/cm	0.0020 - 0.0040 in/in	

Mechanical Properties	Metric	English	Comments
Tensile Stress	145 MPa	21000 psi	
Elongation at Yield	2.0 %	2.0 %	
	2.7 %	2.7 %	flexural
Modulus of Elasticity	12.0 GPa	1740 ksi	
Flexural Strength	200 MPa	29000 psi	
Flexural Modulus	10.0 GPa	1450 ksi	
Charpy Impact Unnotched	3.00 J/cm ²	14.3 ft-lb/in ²	flatwise; ISO 179 1fU
	3.50 J/cm ²	16.7 ft-lb/in ²	ISO 179
	@Temperature -30.0 [°] C	@Temperature -22.0 [°] F	
Charpy Impact, Notched	1.00 J/cm ²	4.76 ft-lb/in ²	ISO 179 1eA
	1.00 J/cm ²	4.76 ft-lb/in ²	ISO 179 eA
	@Temperature -30.0 [°] C	@Temperature -22.0 [°] F	

Thermal Properties	Metric	English	Comments
CTE, linear	30.0 $\mu\text{m}/\text{m}\cdot\text{Å}^\circ\text{C}$	16.7 $\mu\text{in}/\text{in}\cdot\text{Å}^\circ\text{F}$	DIN 53752
Thermal Conductivity	0.430 W/m-K	2.98 BTU-in/hr-ft $\text{Å}^2\cdot\text{Å}^\circ\text{F}$	DIN 52612
Maximum Service Temperature, Air	230 $\text{Å}^\circ\text{C}$	446 $\text{Å}^\circ\text{F}$	
	250 $\text{Å}^\circ\text{C}$	482 $\text{Å}^\circ\text{F}$	short term
Deflection Temperature at 1.8 MPa (264 psi)	249 $\text{Å}^\circ\text{C}$	480 $\text{Å}^\circ\text{F}$	
Flammability, UL94	V-0	V-0	not recognized by UL

Electrical Properties	Metric	English	Comments
Surface Resistance	$\leq 1.00\text{e}+10$ ohm	$\leq 1.00\text{e}+10$ ohm	
Insulation Resistance	$\leq 1.00\text{e}+10$ ohm	$\leq 1.00\text{e}+10$ ohm	

Processing Properties	Metric	English	Comments
Processing Temperature	380 $\text{Å}^\circ\text{C}$	716 $\text{Å}^\circ\text{F}$	mass temp
Nozzle Temperature	390 - 410 $\text{Å}^\circ\text{C}$	734 - 770 $\text{Å}^\circ\text{F}$	
Zone 1	370 - 390 $\text{Å}^\circ\text{C}$	698 - 734 $\text{Å}^\circ\text{F}$	
Zone 2	380 - 390 $\text{Å}^\circ\text{C}$	716 - 734 $\text{Å}^\circ\text{F}$	
Zone 3	380 - 400 $\text{Å}^\circ\text{C}$	716 - 752 $\text{Å}^\circ\text{F}$	
Mold Temperature	180 - 200 $\text{Å}^\circ\text{C}$	356 - 392 $\text{Å}^\circ\text{F}$	
Drying Temperature	180 $\text{Å}^\circ\text{C}$ @Time 18000 - 36000 sec	356 $\text{Å}^\circ\text{F}$ @Time 5.00 - 10.0 hour	Dehumidifying dryer
	200 $\text{Å}^\circ\text{C}$ @Time 10800 - 14400 sec	392 $\text{Å}^\circ\text{F}$ @Time 3.00 - 4.00 hour	or

Descriptive Properties	Value	Comments
Color	dark grey	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China