

Ensinger TECASINT 4211 SD Polyimide, Black, Carbon Fiber (PI)

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

Material Notes:

TECASINT is a range of non-melting high temperature polyimides characterized by high strength over a wide range of temperatures, good long term thermal stability, minimal thermal expansion and excellent wear resistance among other things. The TECASINT 2000 series offers these enhanced thermal properties along with lower moisture absorption, a higher degree of toughness, and better machining properties. TECASINT 2011 is unfilled, while TECASINT 2021 contains 15% graphite which offer improved wear resistance and a lower coefficient of friction. TECASINT 2000 series with their superior physical properties, are ideal for application in the aerospace, nuclear, automotive, electrical/electronics, and chemical processing industries. Main features: High thermal and mechanical capacity, very creep resistant, high gamma radiation resistance, low water absorption, antistatic, low coefficient of thermal expansion, easily machined to tight tolerances, flame retardant according to UL94 V-0. Applications: Mechanical engineering, electronics, cryogenics, nuclear and vacuum technology, aircraft and aerospace industries, semiconductor technology, electrical engineering. Preferred Fields: Switch parts, seals, explosion-protected plants, connector, housing, lead backer. Information Provided by Ensinger Sintimid

Order this product through the following link:

http://www.lookpolymers.com/polymer_Ensinger-TECASINT-4211-SD-Polyimide-Black-Carbon-Fiber-PI.php

Physical Properties	Metric	English	Comments
Density	1.424 g/cc	0.05145 lb/in ³	DIN 53 479

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	90	90	DIN 53 505
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Yield	2.6 %	2.6 %	Flexural Elongation; EN ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Strength	136 MPa	19700 psi	EN ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Modulus	4.90 GPa	711 ksi	EN ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Compressive Yield Strength	204 MPa	29600 psi	EN ISO 604
	@Strain 10.0 %, Temperature 23.0 °C	@Strain 10.0 %, Temperature 73.4 °F	
Compressive Strength	277 MPa	40200 psi	EN ISO 604
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Compressive Modulus	2.55 GPa	370 ksi	EN ISO 604
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
Compression Set	@Temperature 23.0 °C	@Temperature 73.4 °F	Compression at Break; EN ISO 604

Thermal Properties	Metric	English	Comments
CTE, linear	72.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	40.0 $\mu\text{in}/\text{in}\cdot\text{°F}$	DIN 53 752
	@Temperature 50.0 - 200 °C	@Temperature 122 - 392 °F	
	88.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	48.9 $\mu\text{in}/\text{in}\cdot\text{°F}$	DIN 53 752
	@Temperature 200 - 300 °C	@Temperature 392 - 572 °F	
CTE, linear, Transverse to Flow	49.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	27.2 $\mu\text{in}/\text{in}\cdot\text{°F}$	DIN 53 752
	@Temperature 50.0 - 200 °C	@Temperature 122 - 392 °F	
	67.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	37.2 $\mu\text{in}/\text{in}\cdot\text{°F}$	DIN 53 752
	@Temperature 200 - 300 °C	@Temperature 392 - 572 °F	

Electrical Properties	Metric	English	Comments
Surface Resistivity per Square	1.00e+7 - 1.00e+9 ohm	1.00e+7 - 1.00e+9 ohm	IEC 60093
	@Temperature 23.0 °C	@Temperature 73.4 °F	

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