

NeXolve LaRC™-CP1 Conductive Black Polyimide

Category : Polymer , Film , Thermoset , Polyimide, TS , Polyimide, Thermoset Film

Material Notes:

Lower RF loss than other black and conductive black polyimides. NeXolve's Conductive Black LaRC™-CP1 Polyimide is filled with carbon nanoparticles to produce a conductive black polyimide material with lower RF loss than other black and conductive black polyimides. CP1 is a space rated colorless polyimide material designed by NASA and further developed by NeXolve. Conductive Black LaRC-CP1 Polyimide exhibits very high optical density (>4) and light blocking. It is useful in applications requiring static dissipation, as it exhibits ESD-level surface resistivity (105-109 ohms/sq). Conductive Black LaRC-CP1 Polyimide exhibits high emissivity, surpassing 0.80 at 1 mil thickness. Additionally, it can be sprayed and cast into a variety of shapes, using low-temperature curing (

Order this product through the following link:

http://www.lookpolymers.com/polymer_NeXolve-LaRC-CP1-Conductive-Black-Polyimide.php

Mechanical Properties	Metric	English	Comments
Tensile Stress	140 MPa @Thickness 0.0500 mm	20300 psi @Thickness 0.00197 in	ASTM D882-02
Elongation at Break	6.7 % @Thickness 0.0500 mm	6.7 % @Thickness 0.00197 in	ASTM D882-02
Tensile Modulus	6.30 GPa @Thickness 0.0500 mm	914 ksi @Thickness 0.00197 in	ASTM D882-02

Thermal Properties	Metric	English	Comments
CTE, linear	40.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$ @Thickness 1.00 mm, Temperature 125 - 175 $^{\circ}\text{C}$	22.2 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$ @Thickness 0.0394 in, Temperature 257 - 347 $^{\circ}\text{F}$	ASTM E831-06
Glass Transition Temp, Tg	263 $^{\circ}\text{C}$	505 $^{\circ}\text{F}$	DSC; ASTM E1356-03

Optical Properties	Metric	English	Comments
Transmission, Visible	0.00 % @Thickness 0.0130 mm	0.00 % @Thickness 0.000512 in	Solar Transmittivity; ASTM E903-96
	0.00 % @Thickness 0.0250 mm	0.00 % @Thickness 0.000984 in	Solar Transmittivity; ASTM E903-96
	0.00 %	0.00 %	

Optical Properties	Metric	English	Solar Transmittivity; ASTM E903-96 Comments
	@Thickness 0.0500 mm	@Thickness 0.00197 in	
Reflection Coefficient, Visible (0-1)	0.050 @Thickness 0.0130 mm	0.050 @Thickness 0.000512 in	Solar Reflectivity; ASTM E903-96
	0.050 @Thickness 0.0250 mm	0.050 @Thickness 0.000984 in	Solar Reflectivity; ASTM E903-96
	0.050 @Thickness 0.0500 mm	0.050 @Thickness 0.00197 in	Solar Reflectivity; ASTM E903-96

Electrical Properties	Metric	English	Comments
Surface Resistivity per Square	1e+05 - 1.00e+9 ohm	1e+05 - 1.00e+9 ohm	

Descriptive Properties	Value	Comments
Solar Absorptivity	0.95	0.5 mil thickness; ASTM E903-96
	0.95	1.0 mil thickness; ASTM E903-96
	0.95	2.0 mil thickness; ASTM E903-96

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