

DuPont™ Zenite® LCP

liquid crystal polymer resin

PRELIMINARY DATA

Zenite® 7140X BK010

Zenite® 7140X BK010 is a 40% glass reinforced liquid crystal polymer resin with improved weldline strength, low post soldering warpage and a heat deflection temperature of 298°C.

Property	Test Method	Units	Value
Identification			
Resin Identification	ISO 1043		LCP-GF40
Part Marking Code	ISO 11469		>LCP-GF40<
Mechanical			
Stress at Break	ISO 527	MPa (kpsi)	120 (17.4)
Strain at Break	ISO 527	%	1.5
Tensile Modulus	ISO 527	MPa (kpsi)	16500 (2390)
Flexural Modulus	ISO 178	MPa (kpsi)	14000 (2030)
Flexural Strength	ISO 178	MPa (kpsi)	170 (24.7)
Notched Charpy Impact Strength	ISO 179/1eA	kJ/m ²	10
Thermal			
Deflection Temperature 1.80MPa	ISO 75-1/-2 1993/N ₂	°C (°F)	298 (568)
Melting Temperature 10°C/min	ISO 11357-1/-3	°C (°F)	352 (666)
Electrical			
CTI	IEC 60112	V	175

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc.
 ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm.
 Test temperatures are 23°C unless otherwise stated.

During molding, use protective equipment and clothing. Skin contact with molten Zenite® resins can cause severe burns. Be particularly alert during purging.

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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Product Information

Zenite® 7140X BK010

Property	Test Method	Units	Value
Flammability			
Flammability Classification 0.4mm	IEC 60695-11-10		V-0
Flammability Classification 0.4mm	UL94		V-0
Other			
Density	ISO 1183	kg/m ³ (g/cm ³)	1770 (1.77)
Molding Shrinkage	ISO 294-4	%	
Normal, 2.0mm			0.7
Parallel, 2.0mm			0.2
Processing			
Melt Temperature Range		°C (°F)	360-370 (680-700)
Melt Temperature Optimum		°C (°F)	365 (690)
Mold Temperature Range		°C (°F)	40-150 (105-300)
Mold Temperature Optimum		°C (°F)	80 (175)
Drying Time, Dehumidified Dryer		h	3
Drying Temperature		°C (°F)	150 (304)
Processing Moisture Content		%	<0.01

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