

LNP™ THERMOCOMP™ COMPOUND DX11354

REGION ASIA

DESCRIPTION

This is a PC compound with good plating, surface and mechanical performance, a good candidate for Laser Direct Structuring applications.

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	59	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	52	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5.7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	64	%	ASTM D 638
Tensile Modulus, 50 mm/min	2560	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	91	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	750	J/m	ASTM D 256
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	124	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.9E-05	1/°C	ASTM E 831
PHYSICAL			
Density	1.27	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.6 – 0.65	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.6 – 0.65	%	ASTM D 955
Melt Flow Rate, 300°C/1.2 kgf	12	g/10 min	ASTM D 1238
ELECTRICAL			
Relative Permittivity, 1 GHz	2.92	-	IEC 60250
Dissipation Factor, 1 GHz	0.007	-	IEC 60250
FLAME CHARACTERISTICS			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Compliant, 94HB Flame Class Rating (3)(4)	0.6	mm	UL 94 by SABIC-IP
INJECTION MOLDING			
Drying Temperature	100 – 110	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	275 – 300	°C	
Nozzle Temperature	275 – 300	°C	
Front - Zone 3 Temperature	260 – 300	°C	
Middle - Zone 2 Temperature	255 – 295	°C	
Rear - Zone 1 Temperature	250 – 290	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 90	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.038 – 0.076	mm	

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