LNP™ THERMOCOMP™ COMPOUND DX15354

DESCRIPTION

LNP* Thermocomp* DX15354 compound is a Polycarbonate (PC) compound with improved heat resistance performance,good plating,surface aesthetics and RF performance that makes it a good candidate for internal and external parts for Laser Direct Structuring (LDS) applications.

TYPICAL PROPERTY VALUES

Revision 20191216

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	59	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	11	%	ASTM D 638
Tensile Modulus, 5 mm/min	2920	MPa	ASTM D 638
Flexural Stress	111	MPa	ASTM D 790
Flexural Modulus	2890	MPa	ASTM D 790
Tensile Stress, break, 50 mm/min	58	MPa	ISO 527
Tensile Strain, break, 50 mm/min	11	%	ISO 527
Tensile Modulus, 1 mm/min	2940	MPa	ISO 527
Flexural Stress	112	MPa	ISO 178
Flexural Modulus	2880	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	2160	J/m	ASTM D 4812
Izod Impact, notched, 23°C	61	J/m	ASTM D 256
Izod Impact, unnotched 80*10*3 +23°C	182	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	7	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	168	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	155	°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	6.7E-05	1/°C	ASTM E 831
PHYSICAL			
Density	1.29	g/cm³	ASTM D 792
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
Melt Volume Rate, MVR at 330°C/1.2 kg	22.8	cm³/10 min	ISO 1133
ELECTRICAL			
Dielectric Constant, 1.1 GHz	2.95	-	SABIC method
Dissipation Factor, 1.1 GHz	0.006	-	SABIC method
INJECTION MOLDING			
Drying Temperature	135	°C	
Drying Time	4 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	300 – 345	°C	
Nozzle Temperature	295 – 340	°C	
Front - Zone 3 Temperature	300 – 345	°C	
Middle - Zone 2 Temperature	290 – 335	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Rear - Zone 1 Temperature	280 – 315	°C	
Mold Temperature	95 – 130	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 90	rpm	
Shot to Cylinder Size	40 – 60	%	
Vent Depth	0.025 – 0.08	mm	

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