

LNPTM THERMOCOMPTM COMPOUND D551RC

DESCRIPTION

LNP THERMOCOMP D551RC is a compound based on Polycarbonate resin containing Glass Fiber, Flame Retardant. Added features of this material include: High modulus, good flatness, good impact performance, Non-Brominated & Non-Chlorinated Flame Retardant, PCR content up to 30%.

TYPICAL PROPERTY VALUES

Revision 20191217

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Modulus, 5 mm/min	16090	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	13420	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	147	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.35	%	ISO 527
Tensile Modulus, 1 mm/min	15270	MPa	ISO 527
IMPACT			
Izod Impact, unnotched, 23°C	423	J/m	ASTM D 4812
Izod Impact, notched, 23°C	119	J/m	ASTM D 256
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	31	kJ/m ²	ISO 179/1eU
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	12	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	105	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.31E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	4.24E-05	1/°C	ASTM E 831
Relative Temp Index, Elec ⁽¹⁾	80	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽¹⁾	80	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽¹⁾	80	°C	UL 746B
PHYSICAL			
Density	1.618	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.05 – 0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.05 – 0.2	%	ASTM D 955
Melt Volume Rate, MVR at 300°C/2.16 kg	20	cm ³ /10 min	ASTM D 1238
Melt Volume Rate, MVR at 300°C/5.0 kg	34.98	cm ³ /10 min	ASTM D 1238
FLAME CHARACTERISTICS ⁽¹⁾			
UL Yellow Card Link	E207780-102777817	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING			
Drying Temperature	110	°C	
Drying Time	3 – 6	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	285 – 310	°C	
Nozzle Temperature	285 – 305	°C	
Front - Zone 3 Temperature	280 – 300	°C	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Middle - Zone 2 Temperature	270 – 290	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.1 – 0.3	MPa	
Screw Speed	50 – 90	rpm	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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