LNP™ THERMOCOMP™ COMPOUND DX10311

DESCRIPTION

DX10311 is 30% glass fiber reinforced, impact modified polycarbonate resin. High flow and good ductility.

TYPICAL PROPERTY VALUES

Revision 20191217

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	117	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.6	%	ASTM D 638
Tensile Modulus, 5 mm/min	8330	MPa	ASTM D 638
Flexural Stress	190	MPa	ASTM D 790
Flexural Modulus	7670	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	119	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.7	%	ISO 527
Tensile Modulus, 1 mm/min	8260	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	182	MPa	ISO 178
Flexural Stress, break, 2 mm/min	181	MPa	ISO 178
Flexural Modulus, 2 mm/min	7720	MPa	ISO 178
IMPACT			
Charpy Impact, unnotched, 23°C	57	kJ/m²	ISO 179/2C
Izod Impact, unnotched, 23°C	752	J/m	ASTM D 4812
Izod Impact, notched, 23°C	196	J/m	ASTM D 256
Charpy Impact, notched, 23°C	20	kJ/m²	ISO 179/2C
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	128	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.4E-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			
Specific Gravity	1.42	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.1 – 0.3	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.2 – 0.4	%	SABIC method
Melt Volume Rate, MVR at 300°C/5.0 kg	37	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101133363	-	-
UL Recognized, 94HB Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING			
Drying Temperature	90 – 110	°C	
Drying Time	3 – 5	hrs	
Melt Temperature	280 – 320	°C	

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Nozzle Temperature	280 – 320	°C	
Front - Zone 3 Temperature	280 – 320	°C	
Middle - Zone 2 Temperature	280 – 320	°C	
Rear - Zone 1 Temperature	250 – 280	°C	
Mold Temperature	90 – 120	°C	
Back Pressure	1 – 5	MPa	
Screw Speed	30 – 100	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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