LNP™ THERMOCOMP™ COMPOUND DX10313

DESCRIPTION

DX10313 is high modulus polycarbonate, 50% glass filled, with balanced flow and impact strength

TYPICAL PROPERTY VALUES

Revision 20191216

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	154	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.3	%	ASTM D 638
Tensile Modulus, 5 mm/min	14310	MPa	ASTM D 638
Flexural Stress	222	MPa	ASTM D 790
Flexural Modulus	12200	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	152	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	14100	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	207	MPa	ISO 178
Flexural Stress, break, 2 mm/min	206	MPa	ISO 178
Flexural Modulus, 2 mm/min	11900	MPa	ISO 178
IMPACT			
Charpy Impact, unnotched, 23°C	43	kJ/m²	ISO 179/2C
Izod Impact, unnotched, 23°C	669	J/m	ASTM D 4812
Izod Impact, notched, 23°C	166	J/m	ASTM D 256
Charpy Impact, notched, 23°C	16	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	1.6E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.E-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	1.61	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.05 – 0.15	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.1 – 0.25	%	SABIC method
Melt Volume Rate, MVR at 300°C/5.0 kg	18	cm³/10 min	ISO 1133
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E207780-102010576	-	-
UL Recognized, 94HB Flame Class Rating	≥0.4	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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