

# LNP™ THERMOCOMP™ COMPOUND DX10313

REGION ASIA

## DESCRIPTION

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

## TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
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
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
<b>IMPACT</b>			
Charpy Impact, unnotched, 23°C	43	kJ/m <sup>2</sup>	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/m <sup>2</sup>	ISO 179/2C
<b>THERMAL</b>			
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
<b>PHYSICAL</b>			
Specific Gravity	1.61	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.05 – 0.15	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm (5)	0.1 – 0.25	%	SABIC method
Melt Volume Rate, MVR at 300°C/5.0 kg	18	cm <sup>3</sup> /10 min	ISO 1133
<b>MECHANICAL PROPERTIES</b>			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Flexural modulus	12200	MPa	ISO 178/1A
<b>INJECTION MOLDING</b>			
Drying Temperature	90 – 110	°C	
Drying Time	3 – 5	hrs	
Melt Temperature	280 – 320	°C	
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	

## DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a “seller”), is made exclusively under seller’s standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer’s particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.