

# LNPT™ COLORCOMP™ COMPOUND DX09304C

## DESCRIPTION

LNP COLORCOMP DX09304C is an unfilled polycarbonate (PC) resin. Added features of this grade include: easy molding, very low level of leachable ions and low outgassing.

GENERAL INFORMATION	
Features	Good Processability, Low ionics/Outgassing/Liquid particle count, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Flexural Stress, yld, 1.3 mm/min, 50 mm span	94	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2210	MPa	ASTM D790
Flexural Strength, 2 mm/min	92.4	MPa	ISO 178
Flexural Modulus, 2 mm/min	2200	MPa	ISO 178
Tensile Stress, yld, Type I, 50 mm/min	60.4	MPa	ASTM D638
Tensile Stress, brk, Type I, 50 mm/min	59.1	MPa	ASTM D638
Tensile Modulus, 50 mm/min	2283	MPa	ASTM D638
Tensile Strain, yld, Type I, 50 mm/min	0.22	%	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	78.6	%	ASTM D638
Tensile Stress, yield, 50 mm/min	59.4	MPa	ISO 527
Tensile Stress, break, 50 mm/min	60.5	MPa	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Tensile Strain, break, 50 mm/min	106	%	ISO 527
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	790	J/m	ASTM D256
Izod Impact, unnotched, 23°C	2117	J/m	ASTM D4812
Izod Impact, notched, -30°C	108	J/m	ASTM D256
Izod Impact, unnotched 80°10°4 +23°C	139	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	46.5	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80°10°4 -30°C	11.1	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80°10°4 sp=62mm	100.8	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm	63.3	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80°10°4 sp=62mm	11.7	kJ/m <sup>2</sup>	ISO 179/1eA

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	142	°C	ASTM D648
Vicat Softening Temp, Rate A/ 120	149	°C	ISO 306
CTE, 23°C to 80°C, flow	8.0E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.0E-05	1/°C	ISO 11359-2
<b>PHYSICAL</b>			
Specific Gravity <sup>(1)</sup>	1.195	-	ASTM D792
Water Absorption, (23°C/saturated) <sup>(1)</sup>	0.05	%	ISO 62-1
Melt Flow Rate, 300°C/1.2 kgf <sup>(1)</sup>	22	g/10 min	ASTM D1238
Mold Shrinkage, flow <sup>(2)</sup>	0.66	%	SABIC method
Mold Shrinkage, xflow <sup>(2)</sup>	0.69	%	SABIC method
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	100	°C	
Drying Time	3 – 5	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 300	°C	
Nozzle Temperature	260 – 300	°C	
Front - Zone 3 Temperature	260 – 300	°C	
Middle - Zone 2 Temperature	260 – 300	°C	
Rear - Zone 1 Temperature	240 – 260	°C	
Mold Temperature	80 – 120	°C	
Back Pressure	0.1 – 0.5	MPa	
Screw Speed	30 – 100	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

## 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.