LNP™ COLORCOMP™ COMPOUND D1000P

D-1000 EP

DESCRIPTION

LNP COLORCOMP D1000P compound is based on unfilled Polycarbonate (PC) resin. Added features of this grade include: Exceptional Processing.

GENERAL INFORMATION	
Features	High Flow, Aesthetics/Visual effects, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Interiors
Consumer	Home Decoration, Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	62	MPa	ASTM D638
Tensile Stress, break	56	MPa	ASTM D638
Tensile Strain, yield	5.3	%	ASTM D638
Tensile Strain, break	78.7	%	ASTM D638
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D638
Flexural Modulus	2750	MPa	ASTM D790
Tensile Stress, yield	64	MPa	ISO 527
Tensile Stress, break	59	MPa	ISO 527
Tensile Strain, yield	5.6	%	ISO 527
Tensile Strain, break	87	%	ISO 527
Tensile Modulus, 1 mm/min	2210	MPa	ISO 527
Flexural Stress	81	MPa	ISO 178
Flexural Modulus	2300	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched, 23°C	544	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	13	kJ/m²	ISO 180/1A
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	123	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	124	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.2	g/cm³	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs [2]	0.6 – 0.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	0.7 – 0.9	%	ASTM D955
Mold Shrinkage, flow, 24 hrs [2]	0.65	%	ISO 294
Mold Shrinkage, xflow, 24 hrs [2]	0.75	%	ISO 294
Density	1.19	g/cm³	ISO 1183
Melt Flow Rate, 300°C/1.2 kgf	24	g/10 min	ASTM D1238
INJECTION MOLDING [3]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	300 – 315	°C	
Front - Zone 3 Temperature	310 – 320	°C	
Middle - Zone 2 Temperature	305 – 315	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	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.

DISCLAIMER