LNP™ COLORCOMP™ COMPOUND I1000

I-1000

DESCRIPTION

LNP COLORCOMP I1000 compound is based on unfilled Nylon 6/12 resin.

GENERAL INFORMATION	
Features	Aesthetics/Visual effects, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyamide 612 (Nylon 612)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Strain, brk, Type I, 5 mm/min	100	%	ASTM D638
Tensile Stress, yield, 5 mm/min	62	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.5	%	ISO 527
Tensile Modulus, 1 mm/min	2390	MPa	ISO 527
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	55	°C	ASTM D648
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	135	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	62	°C	ISO 75/Af
PHYSICAL [1]			
Specific Gravity	1.06	-	ASTM D792
Mold Shrinkage, flow, 24 hrs [2]	1 – 3	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs [2]	1 – 3	%	ASTM D955
ELECTRICAL [1]			
Volume Resistivity	1.E+15	Ω.cm	ASTM D257
Surface Resistivity	1.E+12	Ω	ASTM D257
Relative Permittivity, 100 Hz	3.6	-	ASTM D150
Relative Permittivity, 1 MHz	3.2	-	ASTM D150
Dissipation Factor, 100 Hz	0.02	-	ASTM D150
Dissipation Factor, 1 kHz	0.02	-	ASTM D150
Dissipation Factor, 100 kHz	0.014	-	ASTM D150

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
FLAME CHARACTERISTICS			
Oxygen Index (LOI)	27	%	ISO 4589
INJECTION MOLDING [3]			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.12 – 0.2	%	
Melt Temperature	270 – 275	°C	
Front - Zone 3 Temperature	270 – 280	°C	
Middle - Zone 2 Temperature	260 – 270	°C	
Rear - Zone 1 Temperature	255 – 265	°C	
Mold Temperature	65 – 95	°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