

LNPT[™] COLORCOMP[™] COMPOUND W1000Z

DESCRIPTION

LNP COLORCOMP W1000Z compound is based on Polybutylene Terephthalate (PBT) resin. Added features of this grade include: Healthcare, High Viscosity suitable for Extrusion.

GENERAL INFORMATION	
Features	Aesthetics/Visual effects, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polybutylene Terephthalate (PBT)
Processing Techniques	Compounding Extrusion, Extrusion

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, yld, Type I, 50 mm/min	51	MPa	ASTM D638
Tensile Strain, brk, Type I, 50 mm/min	300	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	82	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2340	MPa	ASTM D790
Hardness, Rockwell R	117	-	ASTM D785
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1602	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Modified Gardner, 23°C	40	J	ASTM D3029
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 6.4 mm, unannealed	154	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	54	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.1E-05	1/°C	ASTM E831
CTE, 60°C to 138°C, flow	1.4E-04	1/°C	ASTM E831
PHYSICAL ⁽¹⁾			
Specific Gravity	1.31	-	ASTM D792
Specific Volume	0.76	cm ³ /g	ASTM D792
Water Absorption, (23°C/24hrs)	0.08	%	ASTM D570
Mold Shrinkage, flow, 0.75-2.3 mm ⁽²⁾	0.9 – 1.6	%	SABIC method
Mold Shrinkage, flow, 2.3-4.6 mm ⁽²⁾	1.5 – 2.3	%	SABIC method
Mold Shrinkage, xflow, 0.75-2.3 mm ⁽²⁾	1 – 1.7	%	SABIC method
Mold Shrinkage, xflow, 2.3-4.6 mm ⁽²⁾	1.6 – 2.4	%	SABIC method

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Volume Rate, MVR at 250°C/2.16 kg	9	cm ³ /10 min	ASTM D1238
Melt Volume Rate, MVR at 250°C/2.16 kg	9	cm ³ /10 min	ISO 1133
ELECTRICAL ⁽¹⁾			
Volume Resistivity	>4.E+16	Ω.cm	ASTM D257
COMPOUNDING EXTRUSION			
Drying Temperature	110 – 120	°C	
Drying Time	4 – 6	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	245 – 260	°C	
Barrel - Zone 1 Temperature	200 – 230	°C	
Barrel - Zone 2 Temperature	240 – 255	°C	
Barrel - Zone 3 Temperature	240 – 275	°C	
Barrel - Zone 4 Temperature	240 – 275	°C	
Adapter Temperature	240 – 275	°C	
Die Temperature	240 – 275	°C	
Waterbath Temperature	25 – 35	°C	

(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.

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