

LNPTM COLORCOMPTM COMPOUND E1000CE

E-1000 EM UV CCS

DESCRIPTION

LNP COLORCOMP E1000CE compound is based on unfilled Polyetherimide (PEI) resin. Added features of this grade include: Easy Molding, UV Stabilized, LNP Clean Compounding Technology.

GENERAL INFORMATION

Features	Good Processability, Aesthetics/Visual effects, Low ionics/Outgassing/Liquid particle count, High temperature resistance, Weatherable/UV stable, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components, Mobile Phone - Computer - Tablets
Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	110	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	7	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	60	%	ASTM D638
Tensile Modulus, 5 mm/min	3580	MPa	ASTM D638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	165	MPa	ASTM D790
Flexural Modulus, 2.6 mm/min, 100 mm span	3510	MPa	ASTM D790
Hardness, Rockwell M	109	-	ASTM D785
Taber Abrasion, CS-17, 1 kg	10	mg/1000cy	ASTM D1044
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	1335	J/m	ASTM D4812
Izod Impact, notched, 23°C	32	J/m	ASTM D256
Izod Impact, Reverse Notched, 3.2 mm	1174	J/m	ASTM D256
Gardner, 23°C	33	J	ASTM D3029
THERMAL ⁽¹⁾			
Vicat Softening Temp, Rate B/50	218	°C	ASTM D1525
HDT, 0.45 MPa, 6.4 mm, unannealed	207	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	198	°C	ASTM D648
CTE, -20°C to 150°C, flow	5.58E-05	1/°C	ASTM E831
Thermal Conductivity	0.22	W/m-°C	ASTM C177
PHYSICAL ⁽¹⁾			
Specific Gravity	1.27	-	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Water Absorption, (23°C/24hrs)	0.25	%	ASTM D570
Water Absorption, (23°C/Saturated)	1.25	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 337°C/6.6 kgf	17.8	g/10 min	ASTM D1238
ELECTRICAL ⁽¹⁾			
Volume Resistivity	1.E+17	Ω.cm	ASTM D257
Dielectric Strength, in air, 1.6 mm	32.6	kV/mm	ASTM D149
Dielectric Strength, in oil, 1.6 mm	27.9	kV/mm	ASTM D149
Relative Permittivity, 1 kHz	3.15	-	ASTM D150
Dissipation Factor, 1 kHz	0.0013	-	ASTM D150
Dissipation Factor, 2450 MHz	0.0025	-	ASTM D150
FLAME CHARACTERISTICS			
Oxygen Index (LOI)	44	%	ASTM D2863
NBS Smoke Density, Flaming, Ds 4 min	2	-	ASTM E662
INJECTION MOLDING ⁽³⁾			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 400	°C	
Rear - Zone 1 Temperature	360 – 380	°C	
Middle - Zone 2 Temperature	370 – 390	°C	
Front - Zone 3 Temperature	380 – 400	°C	
Nozzle Temperature	390 – 400	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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.

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