LNP™ STAT-LOY™ COMPOUND 63000CT

DESCRIPTION

LNP STAT-LOY 63000CT compound is based on Polycarbonate / Polyester alloy containing proprietary additives targeted for advanced semiconductor packaging applications. Added features of this grade include: LNP Clean Compounding Technology, Permanently Anti-Static, Translucent.

GENERAL INFORMATION	
Features	Antistatic, Transparent/Translucent, Low ionics/Outgassing/Liquid particle count, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polycarbonate + Polyester (PC+Polyester)
Processing Techniques	Injection Molding

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

TYPICAL PROPERTY VALUES

Revision 20241010

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	35	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	200	%	ASTM D638
Tensile Modulus, 5 mm/min	1160	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	50	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1160	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	34	MPa	ISO 527
Tensile Strain, break, 5 mm/min	140	%	ISO 527
Tensile Modulus, 1 mm/min	1180	MPa	ISO 527
Flexural Modulus, 2 mm/min	1140	MPa	ISO 178
IMPACT [1]			
Izod Impact, notched, 23°C	580	J/m	ASTM D256
Charpy Impact, notched, 23°C	69	kJ/m²	ISO 179/2C
THERMAL [1]			
HDT, 0.45 MPa, 6.4 mm, unannealed	83	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	73	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	68	°C	ISO 75/Af
PHYSICAL [1]			
Density	1.16	g/cm³	ASTM D792
Mold Shrinkage, flow [2]	0.6	%	SABIC method
Mold Shrinkage, xflow [2]	0.6	%	SABIC method
Melt Flow Rate, 260°C/2.16 kgf	16	g/10 min	ASTM D1238
Moisture Absorption (23°C / 50% RH)	0.7	%	ISO 62

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
OPTICAL [1]			
Light Transmission, 2.54 mm	81	%	ASTM D1003
Haze, 2.54 mm	10	%	ASTM D1003
ELECTRICAL [1]			
Surface Resistivity [3]	1.E+11 – 5.E+12	Ω	ASTM D257
Volume Resistivity [3]	1.E+11 – 5.E+12	Ω.cm	ASTM D257
Static Decay, 5000V to <50V	<2	Seconds	FTMS101B
INJECTION MOLDING [4]			
Drying Temperature	90 – 95	°C	
Drying Time	6 – 8	Hrs	
Melt Temperature	230 – 250	°C	
Nozzle Temperature	230 – 250	°C	
Front - Zone 3 Temperature	230 – 250	°C	
Middle - Zone 2 Temperature	225 – 240	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	40 – 50	°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.

(3) Measurement meets requirements as specified in ASTM D4496.

(4) 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