LNP™ STAT-LOY™ COMPOUND 63000CTC

DESCRIPTION

LNP STAT-LOY 63000CTC 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 20231109

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	1170	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	52	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1170	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	1190	MPa	ISO 527
Flexural Modulus, 2 mm/min	1150	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	84	°C	ASTM D648
HDT, 1.82 MPa, 6.4 mm, unannealed	75	°C	ASTM D648
CTE, 23°C to 60°C, flow	1.2E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.4E-04	1/°C	ISO 11359-2
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
Moisture Absorption (23°C / 50% RH)	0.7	%	ISO 62

CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
OPTICAL [1]			
Light Transmission, 2.54 mm	77	%	ASTM D1003
Haze, 2.54 mm	25	%	ASTM D1003
ELECTRICAL [1]			
Volume Resistivity [3]	8.E+09 – 3.E+11	Ω.cm	ASTM D257
Surface Resistivity [3]	9.E+09 – 4.E+11	Ω	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.

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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