

LNPTM STAT-LOYTM COMPOUND NX13401

NX13401

DESCRIPTION

LNP STAT-LOY NX13401 compound is based on Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend containing proprietary fillers. Added features of this grade include: Permanently Anti-Static, Flame Retardant, Excellent Mold Release.

GENERAL INFORMATION

Features	Flame Retardant, Antistatic, Enhanced mold release
Fillers	Unreinforced
Polymer Types	Polycarbonate + ABS (PC+ABS)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components
Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yld, Type I, 5 mm/min	45	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	38	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	4.2	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	55.7	%	ASTM D638
Tensile Modulus, 5 mm/min	2050	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	67	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1880	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	44	MPa	ISO 527
Tensile Stress, break, 5 mm/min	37	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	23	%	ISO 527
Tensile Modulus, 1 mm/min	1840	MPa	ISO 527
Flexural Stress	63	MPa	ISO 178
Flexural Modulus, 2 mm/min	1750	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	824	J/m	ASTM D256
Multiaxial Impact	36	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	38	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	26	kJ/m ²	ISO 180/1U
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	95	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	80	°C	ASTM D648

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CHEMISTRY THAT MATTERS™

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, flow	8.5E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	9.3E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	85	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	75	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	60	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	60	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	60	°C	UL 746B
PHYSICAL ⁽¹⁾			
Specific Gravity	1.23	-	ASTM D792
Density	1.23	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.6	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	0.3 – 0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	0.4 – 0.6	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.9	%	ISO 62
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽⁴⁾	1.E+09 – 1.E+11	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E121562-101491406	-	-
UL Recognized, 94V-0 Flame Class Rating	≥0.8	mm	UL 94
INJECTION MOLDING ⁽⁵⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	200 – 230	°C	
Front - Zone 3 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	210 – 220	°C	
Rear - Zone 1 Temperature	200 – 210	°C	
Mold Temperature	40 – 55	°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) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) 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.

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

(5) 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.

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