

LNPTM STAT-LOYTM COMPOUND KX96821

PDX-K-96821

DESCRIPTION

LNP STAT-LOY KX96821 compound is based on POM (Acetal) copolymer resin containing proprietary fillers. Added features of this grade include: Permanently Anti-Static.

GENERAL INFORMATION

Features	Antistatic, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Acetal (POM) Copolymer
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, yield	44	MPa	ASTM D638
Tensile Stress, break	34	MPa	ASTM D638
Tensile Strain, yield	14.8	%	ASTM D638
Tensile Strain, break	54.4	%	ASTM D638
Tensile Modulus, 50 mm/min	1850	MPa	ASTM D638
Flexural Stress	54	MPa	ASTM D790
Flexural Modulus	1600	MPa	ASTM D790
Tensile Stress, yield	43	MPa	ISO 527
Tensile Stress, break	39	MPa	ISO 527
Tensile Strain, yield	11.9	%	ISO 527
Tensile Strain, break	32.3	%	ISO 527
Tensile Modulus, 1 mm/min	1600	MPa	ISO 527
Flexural Stress	40	MPa	ISO 178
Flexural Modulus	1540	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D4812
Izod Impact, notched, 23°C	133	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	32	J	ASTM D3763
Multiaxial Impact	18	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	82	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.35E-04	1/°C	ASTM E83 1
CTE, -40°C to 40°C, xflow	1.49E-04	1/°C	ASTM E83 1
CTE, -40°C to 40°C, flow	1.35E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.49E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	73	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.32	g/cm ³	ASTM D792
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.9	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.8	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	1.88	%	ISO 294
Moisture Absorption, (23°C/50% RH/24 hrs)	3.06	%	ASTM D570
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.82	%	ISO 294
Melt Volume Rate, MVR at 190°C/10.0 kg	15	cm ³ /10 min	ISO 1133
Density	1.32	g/cm ³	ISO 1183
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+09 – 1.E+11	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	
Melt Temperature	195 – 205	°C	
Front - Zone 3 Temperature	200 – 210	°C	
Middle - Zone 2 Temperature	190 – 200	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	70 – 95	°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) 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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