LNP™ STAT-LOY™ COMPOUND K3000Z

K-E

DESCRIPTION

LNP STAT-LOY K3000Z is a compound based on unfilled Acetal resin. Added feature of this material is: Antistat.

TYPICAL PROPERTY VALUES

Revision 20191212

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	41	MPa	ASTM D 638
Tensile Stress, break	32	MPa	ASTM D 638
Tensile Strain, yield	15.8	%	ASTM D 638
Tensile Strain, break	59.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	1590	MPa	ASTM D 638
Flexural Stress	49	MPa	ASTM D 790
Flexural Modulus	1440	MPa	ASTM D 790
Tensile Stress, yield	41	MPa	ISO 527
Tensile Stress, break	36	MPa	ISO 527
Tensile Strain, yield	13.3	%	ISO 527
Tensile Strain, break	49.2	%	ISO 527
Tensile Modulus, 1 mm/min	1500	MPa	ISO 527
Flexural Stress	40	MPa	ISO 178
Flexural Modulus	1500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	NB	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	28	J	ASTM D 3763
Multiaxial Impact	16	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	NB	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	146	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	67	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.3E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.33E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.3E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.33E-04	1/°C	ISO 11359-2
PHYSICAL			
Density	1.32	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	2.29	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	1.81	%	ISO 294

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs	1.83	%	ISO 294
Wear Factor Washer	14	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.42	-	ASTM D 3702 Modified: Manual
Static COF	0.25	-	ASTM D 3702 Modified: Manual
Density	1.33	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	4.28	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+09 – 1.E+11	Ohm	ASTM D 257
INJECTION MOLDING			
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	

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