LNP™ STAT-KON™ COMPOUND KS000MXL

KS000MXL

DESCRIPTION

LNP STAT-KON KS000MXL compound is based on POM (Acetal) copolymer resin containing stainless steel fiber. Added features of this grade include: Low Extractables, Metal Detectable, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Food contact, X-Ray and metal detection
Fillers	Stainless Steel Fiber
Polymer Types	Acetal (POM) Copolymer
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Water Management
Consumer	Home Appliances
Packaging	Industrial Packaging, Food & Beverage

TYPICAL PROPERTY VALUES

Revision 20241028

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	52	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	51	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	11	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	27	%	ASTM D638
Tensile Modulus, 5 mm/min	3010	MPa	ASTM D638
Flexural Modulus, 1.3 mm/min, 50 mm span	2680	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	52	MPa	ISO 527
Tensile Stress, break, 5 mm/min	51	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	11	%	ISO 527
Tensile Strain, break, 5 mm/min	26	%	ISO 527
Tensile Modulus, 1 mm/min	2880	MPa	ISO 527
Flexural Strength, 2 mm/min	75	MPa	ISO 178
Flexural Modulus, 2 mm/min	2590	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	929	J/m	ASTM D4812
Izod Impact, notched, 23°C	58	J/m	ASTM D256
Multiaxial Impact	1	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	5	J	ASTM D3763
Izod Impact, unnotched 80*10*4 +23°C	57	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL [1]			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	158	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	104	°C	ASTM D648
CTE, -30°C to 30°C, flow	9.9E-05	1/°C	ASTM D696
CTE, -30°C to 30°C, xflow	9.8E-05	1/°C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	149	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	95	°C	ISO 75/Af
PHYSICAL (1)			
Specific Gravity	1.73	-	ASTM D792
Density	1.724	g/cm³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.13	%	ASTM D570
Mold Shrinkage, flow, 24 hrs (2)	2.8	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)	2.5	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.21	%	ISO 62
ELECTRICAL (1)			
Surface Resistivity (3)	1.93E+12	Ω	ASTM D257
INJECTION MOLDING (4)			
Drying Temperature	80	°C	
Drying Time	40	Hrs	
Melt Temperature	200 – 215	°C	
Front - Zone 3 Temperature	210 – 220	°C	
Middle - Zone 2 Temperature	195 – 205	°C	
Rear - Zone 1 Temperature	175 – 190	°C	
Mold Temperature	80 – 110	°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.

DISCLAIMER