

LNPTM STAT-KONTM COMPOUND LX00797C

PDX-L-00797 CCS

DESCRIPTION

LNP STAT-KON LX00797C compound is based on Polyetheretherketone (PEEK) resin containing carbon fiber. Added features of this grade include: LNP Clean Compounding Technology, Electrically Conductive, Dimensional Stability.

GENERAL INFORMATION

Features	Electrically Conductive, Low ionics/Outgassing/Liquid particle count, Carbon fiber filled, Dimensional stability, High stiffness/Strength, High temperature resistance
Fillers	Carbon Fiber
Polymer Types	Polyetheretherketone (PEEK)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components, Mobile Phone - Computer - Tablets
Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	179	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Tensile Modulus, 5 mm/min	17280	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	262	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	13600	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	177	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	16280	MPa	ISO 527
Flexural Stress	255	MPa	ISO 178
Flexural Modulus, 2 mm/min	13490	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	657	J/m	ASTM D4812
Izod Impact, notched, 23°C	63	J/m	ASTM D256
Multiaxial Impact	2	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	6	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	40	kJ/m²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 0.45 MPa, 3.2 mm, unannealed	366	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	315	°C	ASTM D648
CTE, -30°C to 30°C, flow	1.1E-05	1/°C	ASTM D696

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -30°C to 30°C, xflow	4.1E-05	1 / °C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	330	°C	ISO 75 /Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	291	°C	ISO 75 /Af
PHYSICAL ⁽¹⁾			
Specific Gravity	1.4	-	ASTM D792
Density	1.4	g / cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.05	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.25	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	1.3	%	ASTM D955
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+04 – 1.E+07	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Front - Zone 3 Temperature	380 – 400	°C	
Middle - Zone 2 Temperature	380 – 400	°C	
Rear - Zone 1 Temperature	370 – 380	°C	
Mold Temperature	175 – 190	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	60 – 100	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.

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