

LNPTM STAT-KONTM COMPOUND EX07311P

EX07311P (SER)

DESCRIPTION

LNP STAT-KON EX07311P compound is based on Polyetherimide (PEI) resin containing carbon fiber (15%), glass fiber (25%) and PTFE. Added features of this grade include: LNP Clean Compounding Technology, Electrically Conductive, Dimensional Stability, Wear Resistant.

GENERAL INFORMATION

Features	Electrically Conductive, Wear resistant, Low ionics/Outgassing/Liquid particle count, Carbon fiber filled, Dimensional stability, High stiffness/Strength, High temperature resistance
Fillers	Carbon Fiber, Glass Fiber, PTFE
Polymer Types	Polyetherimide (PEI)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Mobile Phone - Computer - Tablets
Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	175	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.1	%	ASTM D638
Tensile Modulus, 5 mm/min	15000	MPa	ASTM D638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	200	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	11500	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	174	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	15200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	203	MPa	ISO 178
Flexural Strain, break, 2 mm/min	1.7	%	ISO 178
Flexural Modulus, 2 mm/min	13200	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	56	J/m	ASTM D256
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	202	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.9E-06	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	4.38E-05	1/°C	ASTM E831
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	204	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.56	g/cm ³	ASTM D792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow ⁽²⁾	0.29	%	SABIC method
Mold Shrinkage, xflow ⁽²⁾	0.36	%	SABIC method
Wear Factor Washer	20	10 ⁻⁴ in ³ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.4	-	ASTM D3702 Modified: Manual
Density	1.56	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 345°C/ 10.0 kg	30	cm ³ /10 min	ISO 1133
ELECTRICAL ⁽¹⁾			
Volume Resistivity ⁽³⁾	1.E+05 – 1.E+06	Ω.cm	ASTM D257
Surface Resistivity ⁽³⁾	1.E+05 – 1.E+06	Ω	ASTM D257
Surface Resistivity, ROA	1.E+05 – 1.E+06	Ω	IEC 60093
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	150	°C	
Drying Time	4 – 6	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	360 – 375	°C	
Rear - Zone 1 Temperature	355 – 365	°C	
Middle - Zone 2 Temperature	360 – 370	°C	
Front - Zone 3 Temperature	365 – 375	°C	
Nozzle Temperature	365 – 375	°C	
Mold Temperature	140 – 180	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw speed (Circumferential speed)	0.2 – 0.3	m/s	
Vent Depth	0.025 – 0.076	mm	

(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.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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