

LNPTM STAT-KONTM COMPOUND PX05047

PC

DESCRIPTION

LNP STAT-KON PX05047 compound is based on Nylon 6 resin containing carbon fiber and glass fiber. Added features of this grade include: Electrically Conductive, High Impact, Heat Stabilized.

GENERAL INFORMATION	
Features	Electrically Conductive, Heat Stabilized, Carbon fiber filled, High stiffness/Strength, Impact resistant, No PFAS intentionally added
Fillers	Carbon Fiber, Glass Fiber
Polymer Types	Polyamide 6 (Nylon 6)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

TYPICAL PROPERTY VALUES

Revision 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break, 5 mm/min	114	MPa	ISO 527
Tensile Strain, break, 5 mm/min	3.6	%	ISO 527
Flexural Stress, break, 2 mm/min	159	MPa	ISO 178
Flexural Modulus, 2 mm/min	6000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched 80*10*4 +23°C	50	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
CTE, 23°C to 60°C, flow	1.09E-04	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	1.15E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	214	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	190	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Mold Shrinkage on Tensile Bar, flow ⁽²⁾	0.2 – 0.4	%	SABIC method
Density	1.17	g/cm ³	ISO 1183
Water Absorption, (23°C/24hrs)	1.5	%	ISO 62-1
ELECTRICAL ⁽¹⁾			
Surface Resistivity ⁽³⁾	1.E+03 – 1.E+05	Ω	ASTM D257
INJECTION MOLDING ⁽⁴⁾			
Drying Temperature	80	°C	
Drying Time	4	Hrs	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	265 – 275	°C	
Front - Zone 3 Temperature	275 – 290	°C	
Middle - Zone 2 Temperature	265 – 275	°C	
Rear - Zone 1 Temperature	250 – 260	°C	
Mold Temperature	80 – 95	°C	
Back Pressure	0.3 – 0.7	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.

MORE INFORMATION

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

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