

# LNPTM STAT-KONTM COMPOUND DX05474

DC-1002 EM FR MR

## DESCRIPTION

LNP STAT-KON DX05474 compound is based on Polycarbonate (PC) resin containing 10% carbon fiber. Added features of this grade include: Electrically Conductive, Easy Molding, Flame Retardant, Mold Release.

GENERAL INFORMATION	
Features	Flame Retardant, Electrically Conductive, Good Processability, Enhanced mold release, Carbon fiber filled, High stiffness/Strength
Fillers	Carbon Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

  

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	105	MPa	ASTM D638
Tensile Strain, break	5.9	%	ASTM D638
Tensile Modulus, 50 mm/min	13780	MPa	ASTM D638
Flexural Stress	158	MPa	ASTM D790
Flexural Modulus	7580	MPa	ASTM D790
Tensile Stress, break	107	MPa	ISO 527
Tensile Strain, break	6.4	%	ISO 527
Tensile Modulus, 1 mm/min	7680	MPa	ISO 527
Flexural Stress	169	MPa	ISO 178
Flexural Modulus	7300	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	373	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	28	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	8	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	146	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	143	°C	ASTM D648
CTE, -40°C to 40°C, flow	4.14E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	1.03E-04	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	4.10E-05	1/°C	ISO 11359-2

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	1.03E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	150	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	146	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.29	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.3 – 0.5	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.4 – 0.6	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.36	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.51	%	ISO 294
Density	1.29	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity <sup>(3)</sup>	1.E+03 – 1.E+07	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(4)</sup></b>			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°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.

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