

# LNPTM STAT-KONTM COMPOUND FX91304

PDX-F-91304

## DESCRIPTION

LNP STAT-KON FX91304 compound is based on Polyethylene (PE) resin containing carbon fiber. Added features of this grade include: Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Carbon fiber filled, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polyethylene, Unspecified (PE, Unspecified)
Processing Techniques	Injection Molding
INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Material Handling

## TYPICAL PROPERTY VALUES

Revision 20240201

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, yld, Type I, 5 mm/min	27	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	24	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	3	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	3.6	%	ASTM D638
Tensile Modulus, 50 mm/min	3000	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	35	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	1800	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	26	MPa	ISO 527
Tensile Stress, break, 5 mm/min	22	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.8	%	ISO 527
Tensile Strain, break, 5 mm/min	3.7	%	ISO 527
Tensile Modulus, 1 mm/min	2420	MPa	ISO 527
Flexural Stress	36	MPa	ISO 178
Flexural Modulus, 2 mm/min	2110	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, unnotched, 23°C	505	J/m	ASTM D4812
Izod Impact, notched, 23°C	166	J/m	ASTM D256
Multiaxial Impact	4	J	ISO 6603
Instrumented Dart Impact Total Energy, 23°C	10	J	ASTM D3763
Izod Impact, unnotched 80°10°4 +23°C	31	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	13	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	97	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	72	°C	ASTM D648
CTE, -30°C to 30°C, flow	2.9E-05	1 / °C	ASTM D696
CTE, -30°C to 30°C, xflow	2.32E-04	1 / °C	ASTM D696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	95	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	67	°C	ISO 75/Af
<b>PHYSICAL <sup>(1)</sup></b>			
Specific Gravity	0.95	-	ASTM D792
Density	0.94	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.01	%	ASTM D570
Moisture Absorption (23°C / 50% RH)	0.02	%	ISO 62
<b>ELECTRICAL <sup>(1)</sup></b>			
Surface Resistivity <sup>(2)</sup>	1.E+02 – 1.E+06	Ω	ASTM D257
<b>INJECTION MOLDING <sup>(3)</sup></b>			
Drying Temperature	80	°C	
Drying Time	2 – 4	Hrs	
Melt Temperature	230	°C	
Front - Zone 3 Temperature	220 – 230	°C	
Middle - Zone 2 Temperature	210 – 220	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	40 – 55	°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) Measurement meets requirements as specified in ASTM D4496.

(3) 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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