

Product Texts

LNP STAT-KON LX04420C compound is based on Polyetheretherketone (PEEK) resin containing carbon fiber. Added features of this grade include: LNP Clean Compounding Technology, Electrically Conductive, Dimensional Stability.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.6	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	0.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.6	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	11500	MPa	ISO 527
Yield stress	149	MPa	ISO 527
Yield strain	2.1	%	ISO 527
Stress at break	149	MPa	ISO 527
Strain at break	2.1	%	ISO 527
Flexural modulus	10300	MPa	ISO 178
Flexural strength	241	MPa	ISO 178
Izod impact strength, +23°C, 4mm	212	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	13	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	11990	MPa	ASTM D 638
Tensile Strength at Yield	149	MPa	ASTM D 638
Tensile Strength at Break	149	MPa	ASTM D 638
Elongation at Yield	2.3	%	ASTM D 638
Elongation at Break	2.3	%	ASTM D 638
Flexural Modulus	10790	MPa	ASTM D 790
Flexural Strength	241	MPa	ASTM D 790
Izod Impact notched, 1/8 in	48	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	576	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	246	°C	ISO 75-1/-2
ASTM Data			
DTUL @ 264 psi	300	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	1E8	Ohm	ASTM D 257
Volume Resistivity	1E8	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1360	kg/m ³	ISO 1183
Density	1360	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4 - 6	h	-
Mold temperature	175 - 190	°C	-
Zone 1	370 - 380	°C	-
Zone 2	380 - 400	°C	-
Zone 3	380 - 400	°C	-
Screw speed	60 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity