

Product Texts

LNP STAT-KON REF42I compound is based on Nylon 6/6 resin containing 10% carbon fiber and 20% glass fiber. Added features of this grade include: Electrically Conductive, Impact Modified.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.9	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	13900	MPa	ISO 527
Yield stress	195	MPa	ISO 527
Yield strain	2.6	%	ISO 527
Stress at break	176	MPa	ISO 527
Strain at break	2.7	%	ISO 527
Flexural strength	264	MPa	ISO 178
Izod impact strength, +23°C, 4mm	62	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	12	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	14660	MPa	ASTM D 638
Tensile Strength at Break	197	MPa	ASTM D 638
Elongation at Break	2.6	%	ASTM D 638
Flexural Modulus	11500	MPa	ASTM D 790
Izod Impact notched, 1/8 in	143	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	998	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	247	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	260	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	16	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	94	E-6/K	ASTM D 696
DTUL @ 66 psi	261	°C	ASTM D 648
DTUL @ 264 psi	253	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	10000	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.96	%	Sim. to ISO 62
Water Absorption, 24hr	0.69	%	ASTM D 570
Density	1300	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.25	%	-
Melt temperature	280 - 305	°C	-
Mold temperature	95 - 110	°C	-
Zone 1	265 - 275	°C	-
Zone 2	280 - 295	°C	-
Zone 3	295 - 305	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Regional Availability

North America, Europe, Asia Pacific

Special Characteristics

Increased electrical conductivity, High impact or impact modified