

Product Texts

LNP STAT-KON IS000XXL compound is based on Nylon 6/12 resin containing stainless steel fiber. Added features of this grade include: Food Contact Compliant, Metal Detectable, Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	2	mm/mm	ASTM D 955
Mold Shrinkage, TD	3	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3070	MPa	ISO 527
Stress at break	66	MPa	ISO 527
Strain at break	8.5	%	ISO 527
Flexural modulus	2430	MPa	ISO 178
Flexural strength	82	MPa	ISO 178
Izod impact strength, +23°C, 4mm	35	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	3	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	3040	MPa	ASTM D 638
Tensile Strength at Break	67	MPa	ASTM D 638
Elongation at Yield	9.3	%	ASTM D 638
Elongation at Break	10.2	%	ASTM D 638
Flexural Modulus	2670	MPa	ASTM D 790
Izod Impact notched, 1/8 in	27	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	486	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	72	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	161	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	102	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	119	E-6/K	ASTM D 696
DTUL @ 66 psi	180	°C	ASTM D 648
DTUL @ 264 psi	92	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	1000000	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	0.29	%	Sim. to ISO 62
Water Absorption, 24hr	0.2	%	ASTM D 570
Density	1180	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	≤0.2	%	-
Melt temperature	270 - 275	°C	-
Mold temperature	65 - 95	°C	-
Zone 1	255 - 265	°C	-
Zone 2	260 - 270	°C	-
Zone 3	270 - 280	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics

Processing

Injection Molding

Certifications

Food contact

Special Characteristics

Increased electrical conductivity

Regional Availability

North America, Europe, Asia Pacific

Features

Metal Detectable