LNP™ STAT-KON™ Compound FD000

PE-CD | Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP STAT-KON FD000 compound is based on Polyethylene (PE) resin containing conductive carbon powder. Added features of this grade include: Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**2.5**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**1.5**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**1400**	MPa	ISO 527
Yield stress	**32**	MPa	ISO 527
Yield strain	**5.5**	%	ISO 527
Stress at break	**31**	MPa	ISO 527
Strain at break	**6.5**	%	ISO 527
Flexural strength	**30**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**53**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**2**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2220**	MPa	ASTM D 638
Tensile Strength at Yield	**33**	MPa	ASTM D 638
Tensile Strength at Break	**32**	MPa	ASTM D 638
Elongation at Yield	**6.1**	%	ASTM D 638
Elongation at Break	**9**	%	ASTM D 638
Flexural Modulus	**1300**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**19**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**890**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**51**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**84**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**110**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**110**	E-6/K	ASTM D 696
DTUL @ 66 psi	**90**	°C	ASTM D 648
DTUL @ 264 psi	**51**	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	**1000**	Ohm	ASTM D 257

Other properties	Value	Unit	Test Standard
Humidity absorption	**0.02**	%	Sim. to ISO 62
Density	**1040**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.02**	%	ASTM D 570
Density	**1050**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Melt temperature	**230**	°C	-
Mold temperature	**40 - 55**	°C	-
Zone 1	**195 - 205**	°C	-
Zone 2	**210 - 220**	°C	-
Zone 3	**220 - 230**	°C	-
Screw speed	**30 - 60**	rpm	-

Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Increased electrical conductivity

Regional Availability
North America, Europe, Asia Pacific