LNP™ STAT-KON™ Compound FX91304

PE-CF | Saudi Basic Industries Corporation (SABIC)

Product Texts

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

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	**0.55**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.35**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2420**	MPa	ISO 527
Yield stress	**26**	MPa	ISO 527
Yield strain	**2.8**	%	ISO 527
Stress at break	**22**	MPa	ISO 527
Strain at break	**3.7**	%	ISO 527
Flexural modulus	**2110**	MPa	ISO 178
Flexural strength	**36**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**31**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**13**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**3000**	MPa	ASTM D 638
Tensile Strength at Yield	**27**	MPa	ASTM D 638
Tensile Strength at Break	**24**	MPa	ASTM D 638
Elongation at Yield	**3**	%	ASTM D 638
Elongation at Break	**3.6**	%	ASTM D 638
Flexural Modulus	**1800**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**166**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**505**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**67**	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	**95**	°C	ISO 75-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	**29**	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	**232**	E-6/K	ASTM D 696
DTUL @ 66 psi	**97**	°C	ASTM D 648
DTUL @ 264 psi	**72**	°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	**0.02**	%	Sim. to ISO 62
Water Absorption, 24hr	**0.01**	%	ASTM D 570
Density	**950**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**2 - 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