

Product Texts

LNP STAT-KON KDF20G compound is based on POM (Acetal) copolymer resin containing conductive carbon powder and glass fiber. Added features of this grade include: Low Warpage, Electrically Conductive.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	11	cm ³ /10min	ISO 1133
Temperature	190	°C	-
Load	5	kg	-
ASTM Data			
Mold Shrinkage, MD	0.0175	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.0175	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	3900	MPa	ISO 527
Stress at break	50	MPa	ISO 527
Strain at break	2	%	ISO 527
Flexural modulus, 23°C	3800	MPa	ISO 178
Flexural strength	90	MPa	ISO 178
Charpy impact strength, +23°C	20	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	2	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	16	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	2.5	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	4100	MPa	ASTM D 638
Tensile Strength at Yield	53	MPa	ASTM D 638
Tensile Strength at Break	53	MPa	ASTM D 638
Elongation at Yield	2.7	%	ASTM D 638
Elongation at Break	1.4	%	ASTM D 638
Flexural Modulus	3900	MPa	ASTM D 790
Flexural Strength	90	MPa	ASTM D 790
Izod Impact notched, 1/8 in	29	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	225	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	117	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	157	°C	ISO 75-1/-2
Vicat softening temperature, B	150	°C	ISO 306
Coeff. of linear therm. expansion, parallel	76	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90	E-6/K	ISO 11359-1/-2
ASTM Data			
Coefficient of Thermal Expansion, MD	76	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	90	E-6/K	ASTM D 696
DTUL @ 66 psi	159	°C	ASTM D 648
DTUL @ 264 psi	120	°C	ASTM D 648
Vicat Temperature	150	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
Other Standards^[S]			
Volume resistivity	10	Ohm*m	IEC 60093
Surface resistivity	10000	Ohm	IEC 60093
Surface Resistivity	10000	Ohm	ASTM D 4496
Volume Resistivity	1000	Ohm*cm	ASTM D 4496

S: These properties are reported by the producer according standards that are different to our defaults.

LNP™ STAT-KON™ Compound KDF20G

POM-(CF+GF)

Saudi Basic Industries Corporation (SABIC)

Other properties	Value	Unit	Test Standard
Water absorption	0.57	%	Sim. to ISO 62
Humidity absorption	0.08	%	Sim. to ISO 62
Density	1510	kg/m ³	ISO 1183

Film Properties	Value	Unit	Test Standard
Other Standards^[5]			
Dynamic coefficient of friction	0.5	-	ASTM D 3702

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Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Melt temperature	180 - 200	°C	-
Mold temperature	80 - 120	°C	-
Zone 1	175 - 200	°C	-
Zone 2	180 - 200	°C	-
Zone 3	180 - 200	°C	-
Nozzle temperature	175 - 200	°C	-
Back pressure	0.2 - 0.3	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Increased electrical conductivity

Features

Low Warpage, Copolymer

Applications

Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America