

**Product Texts**

LNP KONDUIT 8TF29E compound is based on Liquid Crystal Polymer (LCP) resin containing 10% glass fibers proprietary thermal filler. Added features of this grade include: Thermally Conductive, Electrically Insulative, High flow, Low Moisture absorption, Low CTE values. This product is available in dark colours only.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Melt Flow Index, MFI	10	g/10min	ASTM D 1238
Temperature	345	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.001	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.002	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	13400	MPa	ISO 527
Stress at break	77	MPa	ISO 527
Strain at break	1.6	%	ISO 527
Flexural modulus, 23°C	14300	MPa	ISO 178
Flexural strength	110	MPa	ISO 178
Charpy impact strength, +23°C	12	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	8.7	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, +23°C, 3mm	13.3	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	10.4	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	5.1	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	4.4	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, +23°C, 3mm	5.6	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	5.1	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact strength, +23°C	13.3	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	5.2	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	4.6	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
<b>ASTM Data</b>			
Tensile Modulus	13950	MPa	ASTM D 638
Tensile Strength at Break	90	MPa	ASTM D 638
Elongation at Break	1.8	%	ASTM D 638
Flexural Modulus	14200	MPa	ASTM D 790
Flexural Strength	130	MPa	ASTM D 790
Izod Impact notched, 1/8 in	47	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	40	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	200	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	254	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	280	°C	ISO 75-1/-2
Vicat softening temperature, B	190	°C	ISO 306
<b>ASTM Data</b>			
DTUL @ 66 psi	280	°C	ASTM D 648
DTUL @ 264 psi	252	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Surface Resistivity	1E14	Ohm	ASTM D 257
Volume Resistivity	1E15	Ohm*cm	ASTM D 257

**LNP™ KONDUIT™ Compound 8TF29E**

LCP-GF10

Saudi Basic Industries Corporation (SABIC)

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1780</b>	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	<b>140 - 150</b>	°C	-
Pre-drying - Time	<b>4 - 6</b>	h	-
Melt temperature	<b>340 - 345</b>	°C	-
Mold temperature	<b>100 - 120</b>	°C	-
Zone 1	<b>280 - 300</b>	°C	-
Zone 2	<b>330 - 340</b>	°C	-
Zone 3	<b>340 - 350</b>	°C	-
Nozzle temperature	<b>340 - 350</b>	°C	-
Screw speed	<b>80 - 100</b>	rpm	-
Back pressure	<b>0.1 - 0.4</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Applications**

Electrical and Electronical

**Special Characteristics**

Thermally Conductive

**Regional Availability**

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