LNP™ STAT-KON™ Compound DE002ER

PC-CF10 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP STAT-KON DE002ER compound is based on Polycarbonate (PC) resin containing 10% carbon fiber. Added features of this grade include: Easy Molding. Mold Release, Electrically Conductive.

UL Yellow Card Link E207780-101284262

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.2**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.4**	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	**0.2**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.3**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**6800**	MPa	ISO 527
Stress at break	**102**	MPa	ISO 527
Strain at break	**3.3**	%	ISO 527
Flexural modulus	**6960**	MPa	ISO 178
Flexural strength	**170**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**39**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**7**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**6960**	MPa	ASTM D 638
Tensile Strength at Break	**100**	MPa	ASTM D 638
Elongation at Break	**2.8**	%	ASTM D 638
Flexural Modulus	**6130**	MPa	ASTM D 790
Flexural Strength	**165**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**95**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**563**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**142**	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	**V-1**	class	IEC 60695-11-10
Thickness tested	**1.6**	mm	-
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**3.4**	mm	-
ASTM Data			
DTUL @ 66 psi	**143**	°C	ASTM D 648
DTUL @ 264 psi	**141**	°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	**0.66**	%	Sim. to ISO 62
Density	**1230**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.17**	%	ASTM D 570
Density	**1230**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**120**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**305 - 325**	°C	-

Mold temperature	**80 - 110**	°C	-
Zone 1	**295 - 305**	°C	-
Zone 2	**310 - 320**	°C	-
Zone 3	**320 - 330**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Regional Availability
North America, Europe, Asia Pacific

Special Characteristics
Increased electrical conductivity