

LNP (SABIC Innovative Plastics) Stat-Kon® D- FR ECO Polycarbonate, Carbon Powder

Subcategory: Filled/Reinforced Thermoplastic; Polycarbonate; Polymer; Thermoplastic

Close Analogs: Saudi Basic Industries Corporation (SABIC) announced on August 31st, 2007, the completion of its purchase of GE Plastics.

Material Notes:

- Features: Electrically Conductive, Flame Retardant, ECO Compliant
- Forms: Pellets
- Processing Method: Injection Molding

Information provided by LNP, a GE Plastics Company.

Physical Properties	Metric	English	Comments
Specific Gravity	1.28 g/cc	0.0462 lb/in ³	Method A; ASTM D792
Water Absorption	0.1 %	0.1 %	at 24 hrs; ASTM D570
Linear Mold Shrinkage	0.004 cm/cm	0.004 in/in	ASTM D955
Linear Mold Shrinkage, Transverse	0.004 cm/cm	0.004 in/in	ASTM D955
Mechanical Properties			
Tensile Strength at Break	64.1 MPa	9300 psi	ASTM D638
Tensile Strength, Yield	64.1 MPa	9300 psi	ASTM D638
Elongation at Break	3.6 %	3.6 %	ASTM D638
Elongation at Yield	3.6 %	3.6 %	ASTM D638
Tensile Modulus	3.45 GPa	500 ksi	ASTM D638
Flexural Modulus	3.52 GPa	511 ksi	ASTM D790
Flexural Strength	110 MPa	16000 psi	ASTM D790
Izod Impact, Notched	0.214 J/cm	0.401 ft-lb/in	3.18 mm; ASTM D256
Izod Impact, Notched (ISO)	2.4 kJ/m ²	1.14 ft-lb/in ²	ISO 180
Izod Impact, Unnotched	5.5 J/cm	10.3 ft-lb/in	3.18 mm; ASTM D256
Izod Impact, Unnotched (ISO)	37 kJ/m ²	17.6 ft-lb/in ²	ISO 180
Falling Dart Impact	1.93 J	1.42 ft-lb	ASTM D3763
Impact Test	0.7 J	0.516 ft-lb	Multi-Axial Instrumented Impact Energy; ISO 6603-2
Electrical Properties			
Surface Resistance	100 - 1e+006 ohm	100 - 1e+006 ohm	ASTM D4496
Thermal Properties			
CTE, linear 20°C	52 µm/m-°C	28.9 µin/in-°F	TMA; ASTM E831
CTE, linear 20°C Transverse to Flow	52 µm/m-°C	28.9 µin/in-°F	TMA; ASTM E831
Deflection Temperature at 0.46 MPa (66 psi)	86.7 °C	188 °F	Unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	82.2 °C	180 °F	Unannealed; ASTM D648
Flammability, UL94	V-0	V-0	1.70 mm
Processing Properties			
Melt Temperature	252 - 288 °C	486 - 550 °F	
Mold Temperature	37.8 - 65.6 °C	100 - 150 °F	
Drying Temperature	82.2 °C	180 °F	
Dry Time	4 hour	4 hour	
Moisture Content	0.02 %	0.02 %	Suggested
Back Pressure	0.172 - 0.345 MPa	24.9 - 50 psi	