LNP™ STAT-KON™ COMPOUND DX13320C

DESCRIPTION

LNP STAT-KON DX13320C compound is based on Polycarbonate (PC) resin containing 20% carbon fiber. Added features of this grade include: LNP Clean Compounding Technology, Low LPC, Low Ionics, Low Outgassing, Low C18-C40 Hydrocarbons, Electrically Conductive.

GENERAL INFORMATION	
Features	Electrically Conductive, Low ionics/Outgassing/Liquid particle count, Carbon fiber filled, High stiffness/Strength, No PFAS intentionally added
Fillers	Carbon Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Mobile Phone - Computer - Tablets

TYPICAL PROPERTY VALUES

Revision 20241028

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, brk, Type I, 5 mm/min	152	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D638
Tensile Modulus, 5 mm/min	15170	MPa	ASTM D638
Flexural Stress	209	MPa	ASTM D790
Flexural Modulus	11500	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	150	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	14590	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	187	MPa	ISO 178
Flexural Modulus, 2 mm/min	11600	MPa	ISO 178
IMPACT [1]			
Charpy Impact, unnotched, 23°C	28	kJ/m²	ISO 179/2C
Izod Impact, unnotched, 23°C	410	J/m	ASTM D4812
Izod Impact, notched, 23°C	70	J/m	ASTM D256
Charpy Impact, notched, 23°C	7	kJ/m²	ISO 179/2C
THERMAL [1]			
HDT, 1.82 MPa, 3.2mm, unannealed	117	°C	ASTM D648
CTE, -40°C to 40°C, flow	9.2E-06	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.97E-05	1/°C	ASTM E831
Relative Temp Index, Elec [2]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [2]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [2]	80	°C	UL 746B
PHYSICAL [1]			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Specific Gravity	1.26	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm [3]	0.1 – 0.2	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm [3]	0.2 – 0.4	%	SABIC method
Melt Volume Rate, MVR at 300°C/5.0 kg	34	cm³/10 min	ISO 1133
ELECTRICAL [1]			
Volume Resistivity [4]	5.E+03 – 5.E+05	Ω.cm	ASTM D257
Surface Resistivity [4]	5.E+03 – 5.E+05	Ω	ASTM D257
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-101977560	-	-
UL Recognized, 94HB Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING [5]			
Drying Temperature	90 – 110	°C	
Drying Time	3 – 5	Hrs	
Melt Temperature	280 – 320	°C	
Nozzle Temperature	280 – 320	°C	
Front - Zone 3 Temperature	280 – 320	°C	
Middle - Zone 2 Temperature	280 – 320	°C	
Rear - Zone 1 Temperature	250 – 280	°C	
Mold Temperature	90 – 120	°C	
Back Pressure	1 – 5	MPa	
Screw Speed	30 – 100	rpm	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
(2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(4) Measurement meets requirements as specified in ASTM D4496.
(5) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

MORE INFORMATION

For curve data and CAE cards, please visit and register at https://materialfinder.sabic-specialties.com

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