

LNPT[™] STAT-KON[™] COMPOUND DX13315C

DESCRIPTION

LNP STAT-KON DX13315C compound is based on Polycarbonate (PC) resin containing 15% 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
Fillers	Carbon Fiber
Polymer Types	Polycarbonate (PC)
Processing Techniques	Injection Molding

INDUSTRY

Electrical and Electronics
Industrial

SUB INDUSTRY

Electronic Components, Mobile Phone - Computer - Tablets
Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20230607

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, brk, Type I, 5 mm/min	129	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	2.7	%	ASTM D638
Tensile Modulus, 5 mm/min	10410	MPa	ASTM D638
Flexural Stress	199	MPa	ASTM D790
Flexural Modulus	9170	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	130	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.6	%	ISO 527
Tensile Modulus, 1 mm/min	10640	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	203	MPa	ISO 178
Flexural Modulus, 2 mm/min	9290	MPa	ISO 178
IMPACT ⁽¹⁾			
Charpy Impact, unnotched, 23°C	45	kJ/m ²	ISO 179/2C
Izod Impact, unnotched, 23°C	591	J/m	ASTM D4812
Izod Impact, notched, 23°C	88	J/m	ASTM D256
Charpy Impact, notched, 23°C	9	kJ/m ²	ISO 179/2C
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	123	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.4E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.1E-05	1/°C	ASTM E831
PHYSICAL ⁽¹⁾			
Specific Gravity	1.26	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.1 – 0.3	%	SABIC method

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 3.2 mm ⁽²⁾	0.2 – 0.5	%	SABIC method
Melt Volume Rate, MVR at 300°C/5.0 kg	30	cm ³ /10 min	ISO 1133
ELECTRICAL ⁽¹⁾			
Volume Resistivity ⁽³⁾	5.E+04 – 5.E+06	Ω.cm	ASTM D257
Surface Resistivity ⁽³⁾	5.E+03 – 5.E+05	Ω	ASTM D257
FLAME CHARACTERISTICS ⁽⁴⁾			
UL Yellow Card Link	E207780-102010749	-	-
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) 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.

(3) Measurement meets requirements as specified in ASTM D4496.

(4) 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.

(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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