LNP™ STAT-KON™ COMPOUND DD200C

DESCRIPTION

LNP STAT-KON DD200C compound is based on Polycarbonate (PC) resin containing conductive carbon powder and proprietary lubricant. Added features of this grade include: LNP Clean Compounding Technology, Low LPC, Low Ionics, Low Outgassing, Electrically Conductive.

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

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components, Mobile Phone - Computer - Tablets
Industrial	Electrical, Material Handling

TYPICAL PROPERTY VALUES

Revision 20241025

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yld, Type I, 5 mm/min	53	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	46	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	5.3	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	10	%	ASTM D638
Tensile Modulus, 5 mm/min	2400	MPa	ASTM D638
Flexural Stress	87	MPa	ASTM D790
Flexural Modulus	2200	MPa	ASTM D790
Tensile Stress, yield, 5 mm/min	53	MPa	ISO 527
Tensile Stress, break, 5 mm/min	53	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5.2	%	ISO 527
Tensile Strain, break, 5 mm/min	10	%	ISO 527
Tensile Modulus, 1 mm/min	2340	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	87	MPa	ISO 178
Flexural Modulus, 2 mm/min	2380	MPa	ISO 178
IMPACT [1]			
Charpy Impact, unnotched, 23°C	92	kJ/m²	ISO 179/2C
Izod Impact, unnotched, 23°C	1800	J/m	ASTM D4812
Izod Impact, notched, 23°C	115	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	90	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	9	kJ/m²	ISO 179/1eA
THERMAL [1]			
HDT, 0.45 MPa, 3.2 mm, unannealed	138	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D648
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]			
Specific Gravity	1.22	-	ASTM D792
Mold Shrinkage, flow [3]	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow [3]	0.5 – 0.7	%	SABIC method
Density	1.2	g/cm³	ISO 1183
ELECTRICAL [1]			
Surface Resistivity [4]	1.E+05 – 1.E+09	Ω	ASTM D257
Static Decay, 5000V to <50V	<0.1	Seconds	FTMS101B
FLAME CHARACTERISTICS [2]			
UL Yellow Card Link	E207780-101260651	-	-
UL Recognized, 94HB Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING [5]			
Drying Temperature	120	°C	
Drying Time	4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	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.

DISCLAIMER