LNP™ STAT-KON™ COMPOUND DX05301C

PDX-D-05301 CCS
REGION ASIA

DESCRIPTION

LNP STAT-KON DX05301C is a compound based on Polycarbonate containing Proprietary Filler(s). Added features of this material include: Clean Compounding System, Electrically Conductive, Low Ionic, Low Outgassing, Low LPC and ESD safe. Suitable for Semiconductor and Hard Disk Drive (HDD) Applications.

TYPICAL PROPERTY VALUES

Revision 20190326

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	48	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	60	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	9.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	2590	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	95	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2280	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Stress, break, 5 mm/min	56	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.5	%	ISO 527
Tensile Strain, break, 5 mm/min	1.5	%	ISO 527
Tensile Modulus, 1 mm/min	2490	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	77	MPa	ISO 178
Flexural Modulus, 2 mm/min	2480	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	54	J/m	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	132	°C	ASTM D 648
Vicat Softening Temp, Rate B/120	146	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	131	°C	ISO 75/Af
Relative Temp Index, Elec [(1)]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [(1)]	80	°C	UL 746B
Relative Temp Index, Mech w/o impact [(1)]	80	°C	UL 746B
PHYSICAL			
Specific Gravity	1.22	-	ASTM D 792
Mold Shrinkage, flow	0.6	%	SABIC method
Mold Shrinkage, xflow	0.6	%	SABIC method
Melt Flow Rate, 300°C/5.0 kgf	22.6	g/10 min	ASTM D 1238
Density	1.22	g/cm³	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	22	cm³/10 min	ISO 1133
ELECTRICAL			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Volume Resistivity	1.E+05 – 4.5E+08	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+05 – 4.5E+08	Ohm	ASTM D 257
Static Decay, 5000V to <50V	0.1	< seconds	FTMS101B
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E207780-101282790	-	-
UL Recognized, 94HB Flame Class Rating	≥1	mm	UL 94
INJECTION MOLDING			
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) 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.

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