LNP™ STAT-KON™ COMPOUND DX11408

DX11408

DESCRIPTION

LNP* STAT-KON* DX11408 is a compound based on Polycarbonate containing Carbon Powder. Added features of this material include: Electrically Conductive, Improved Ductility

TYPICAL PROPERTY VALUES

Revision 20200109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	56	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	48	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.7	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	22	%	ASTM D 638
Tensile Modulus, 5 mm/min	2590	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2680	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	55	MPa	ISO 527
Tensile Stress, break, 5 mm/min	48	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.6	%	ISO 527
Tensile Strain, break, 5 mm/min	16	%	ISO 527
Tensile Modulus, 1 mm/min	2630	MPa	ISO 527
Flexural Stress	88	MPa	ISO 178
Flexural Modulus, 2 mm/min	2480	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	940	J/m	ASTM D 4812
Izod Impact, notched, 23°C	337	J/m	ASTM D 256
Multiaxial Impact	34	J	ISO 6603
Instrumented Impact Total Energy, 23°C	38	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	21	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	137	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	130	°C	ASTM D 648
CTE, -30°C to 30°C, flow	6.2E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.52E-03	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	136	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	127	°C	ISO 75/Af
Relative Temp Index, Mech w/impact [1]	115	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	115	°C	UL 746B
PHYSICAL			
Specific Gravity	1.25	-	ASTM D 792
Density	1.25	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.12	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.6 – 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.9 – 2	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Moisture Absorption (23°C / 50% RH)	0.19	%	ISO 62
ELECTRICAL			
Volume Resistivity	1000 – 1000000	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+03 – 1.E+06	Ohm	ASTM D 257
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E121562-101212124	-	-
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
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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