LNP™ STAT-KON™ COMPOUND DX05042

DESCRIPTION

LNP™ STAT-KON™ DX05042 is a compound based on Polycarbonate resin containing Proprietary Filler(s). Added feature of this material is: Electrically Conductive and easy molding.

TYPICAL PROPERTY VALUES

Revision 20191210

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	167	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	16400	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	256	MPa	ISO 178
Flexural Modulus, 2 mm/min	14100	MPa	ISO 178
Tensile Stress, brk, Type I, 5 mm/min	169	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 5 mm/min	16400	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	248	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	13100	MPa	ASTM D 790
IMPACT			
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
Izod Impact, unnotched 80*10*4 +23°C	45	kJ/m²	ISO 180/1U
Izod Impact, notched, 23°C	100	J/m	ASTM D 256
Izod Impact, unnotched, 23°C	640	J/m	ASTM D 4812
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	11	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	45	kJ/m²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	143	°C	ISO 306
Vicat Softening Temp, Rate B/50	143	°C	ASTM D 1525
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	144	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	137	°C	ISO 75/Af
HDT, 1.82 MPa, 3.2mm, unannealed	135	°C	ASTM D 648
CTE, 23°C to 80°C, flow	1.0E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.4E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, flow	0.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.5E-05	1/°C	ASTM E 831
PHYSICAL			
Mold Shrinkage, flow	0.04	%	SABIC method
Mold Shrinkage, xflow	0.4	%	SABIC method
Density	1.37	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.08	%	ISO 62
Moisture Absorption, 50% RH, 24 hrs	0.02	%	ASTM D 570
Water Absorption, 24 hours	0.15	%	ASTM D 570
Water Absorption, (23°C/sat)	0.27	%	ISO 62

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Wear Factor Washer	36	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified: Manual
Dynamic COF	0.23	-	ASTM D 3702 Modified: Manual
Static COF	0.39	-	ASTM D 3702 Modified: Manual
ELECTRICAL			
Surface Resistivity	1.E+02 – 1.E+03	Ohm	ASTM D 257
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	

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