LNP™ STAT-KON™ COMPOUND DE003

DC-1003 EM MR

DESCRIPTION

LNP STAT-KON* DE003 is a compound based on Polycarbonate resin containing Carbon Fiber.

TYPICAL PROPERTY VALUES

Revision 20191212

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	109	MPa	ASTM D 638
Tensile Strain, break	2.1	%	ASTM D 638
Tensile Modulus, 50 mm/min	8780	MPa	ASTM D 638
Flexural Stress	182	MPa	ASTM D 790
Flexural Modulus	7790	MPa	ASTM D 790
Tensile Stress, break	108	MPa	ISO 527
Tensile Strain, break	2	%	ISO 527
Tensile Modulus, 1 mm/min	8410	MPa	ISO 527
Flexural Stress	176	MPa	ISO 178
Flexural Modulus	8040	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	491	J/m	ASTM D 4812
Izod Impact, notched, 23°C	74	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	15	J	ASTM D 3763
Multiaxial Impact	3	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	33	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	145	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	137	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.76E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.77E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	145	°C	ISO 75/Af
PHYSICAL			
Density	1.24	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.16	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.04 – 0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.3 – 0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.04 – 0.13	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.32 – 0.41	%	ISO 294
Density	1.24	g/cm³	ISO 1183
ELECTRICAL			

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	1.E+01 – 1.E+05	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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