LNP™ STAT-KON™ COMPOUND MD000IS

M-1 HI BK8-114
REGION AMERICAS

DESCRIPTION

LNP STAT-KON* MD000IS is a compound based on Polypropylene resin containing Carbon Powder. Added features of this material include: Electrically Conductive, High Impact.

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	21	MPa	ASTM D 638
Tensile Stress, break	17	MPa	ASTM D 638
Tensile Strain, yield	9	%	ASTM D 638
Tensile Strain, break	133.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	480	MPa	ASTM D 638
Flexural Stress	27	MPa	ASTM D 790
Tensile Stress, yield	18	MPa	ISO 527
Tensile Stress, break	17	MPa	ISO 527
Tensile Modulus, 1 mm/min	1100	MPa	ISO 527
Flexural Stress	27	MPa	ISO 178
Flexural Modulus	1200	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1553	J/m	ASTM D 4812
Izod Impact, notched, 23°C	833	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	24	J	ASTM D 3763
Multiaxial Impact	31	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	112	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	65	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	81	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	52	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.01E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.19E-04	1/°C	ASTM E 831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.01E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.19E-04	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	56	°C	ISO 75/Af
PHYSICAL			
Density	0.98	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.03	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1.6 – 1.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.6 – 1.8	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1.6 – 1.8	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.58 – 1.8	%	ISO 294
Density	0.97	g/cm³	ISO 1183
ELECTRICAL			
Surface Resistivity	1.E+01 – 1.E+06	Ohm	ASTM D 257
Static Decay, 5000V to <50V	0.01	< seconds	FTMS101B
MECHANICAL PROPERTIES			
Flexural modulus	1130	MPa	ISO 178/1A
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Melt Temperature	225 – 250	°C	
Front - Zone 3 Temperature	240 – 250	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	195 – 205	°C	
Mold Temperature	30 – 50	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

DISCLAIMER