LNP™ STAT-KON™ COMPOUND RFD04

RF-20

DESCRIPTION

LNP STAT-KON* RFD04 is a compound based on Nylon 66 resin containing 20% Glass Fiber. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20191212

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	124	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	9200	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	190	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	8540	MPa	ASTM D 790
Tensile Stress, break	117	MPa	ISO 527
Tensile Stress, break, 5 mm/min	119	MPa	ISO 527
Tensile Strain, break	1.3	%	ISO 527
Tensile Strain, break, 5 mm/min	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	8780	MPa	ISO 527
Flexural Stress	185	MPa	ISO 178
Flexural Modulus	8600	MPa	ISO 178
Flexural Modulus, 2 mm/min	8170	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	301	J/m	ASTM D 4812
Izod Impact, notched, 23°C	36	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Instrumented Impact Total Energy, 23°C	3	J	ASTM D 3763
Izod Impact, unnotched 80*10*3 +23°C	20	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	259	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	248	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.4E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.1E-05	1/°C	ASTM D 696
CTE, -40°C to 40°C, flow	3.22E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.46E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	257	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	242	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.4	-	ASTM D 792
Density	1.39	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.5	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.5 – 0.7	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, xflow, 24 hrs	1 – 3	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.61	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.35	%	ISO 294
Density	1.39	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.75	%	ISO 62
ELECTRICAL			
Surface Resistivity	1.E+03 – 1.E+07	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	280 – 305	°C	
Front - Zone 3 Temperature	295 – 305	°C	
Middle - Zone 2 Temperature	280 – 295	°C	
Rear - Zone 1 Temperature	265 – 275	°C	
Mold Temperature	95 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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