LNP™ FARADEX™ COMPOUND WX94736

PDX-W-94736

DESCRIPTION

LNP* FARADEX* WX94736 is a compound based on PBT resin containing Stainless Steel. Added features of this material include: EMI/RFI Shielding, Electrically Conductive.

TYPICAL PROPERTY VALUES

Revision 20191211

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	53	MPa	ASTM D 638
Tensile Stress, break	53	MPa	ASTM D 638
Tensile Strain, yield	2.7	%	ASTM D 638
Tensile Strain, break	2.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	3440	MPa	ASTM D 638
Flexural Stress	55	MPa	ASTM D 790
Tensile Stress, yield	53	MPa	ISO 527
Tensile Stress, break	53	MPa	ISO 527
Tensile Strain, yield	2.8	%	ISO 527
Tensile Strain, break	2.9	%	ISO 527
Tensile Modulus, 1 mm/min	3110	MPa	ISO 527
Flexural Stress	83	MPa	ISO 178
Flexural Modulus	3100	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	614	J/m	ASTM D 4812
Izod Impact, notched, 23°C	58	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	6	J	ASTM D 3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	22	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	143	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	99	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.28E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.84E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	8.3E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.9E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	147	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	123	°C	ISO 75/Af
PHYSICAL			
Density	1.51	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.8 – 1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 – 1.2	%	ASTM D 955

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.89	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1.1	%	ISO 294
Density	1.5	g/cm³	ISO 1183
ELECTRICAL			
Volume Resistivity	1.E+03 – 1.E+07	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+02 – 1.E+06	Ohm	ASTM D 257
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	240 – 265	°C	
Front - Zone 3 Temperature	260 – 270	°C	
Middle - Zone 2 Temperature	245 – 255	°C	
Rear - Zone 1 Temperature	220 – 230	°C	
Mold Temperature	80 – 100	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

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