



LNP™ FARADEX™ Compound MS003

Americas: COMMERCIAL

Also known as: LNP™ FARADEX™ Compound MS-1003

Product reorder name: MS003

LNP™ FARADEX™ MS003 is a compound based on Polypropylene resin containing 15% Stainless Steel. Added features of this material include: Electrically Conductive, EMI/RFI Shielding.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield	200	kgf/cm ²	ASTM D 638
Tensile Stress, break	150	kgf/cm ²	ASTM D 638
Tensile Strain, yield	6.2	%	ASTM D 638
Tensile Strain, break	88.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	12200	kgf/cm ²	ASTM D 638
Flexural Stress	280	kgf/cm ²	ASTM D 790
Flexural Modulus	12100	kgf/cm ²	ASTM D 790
Tensile Stress, yield	21	MPa	ISO 527
Tensile Stress, break	15	MPa	ISO 527
Tensile Strain, yield	5.2	%	ISO 527
Tensile Strain, break	72	%	ISO 527
Tensile Modulus, 1 mm/min	1300	MPa	ISO 527
Flexural Stress	32	MPa	ISO 178
Flexural Modulus	1500	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	125	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	27	cm-kgf/cm	ASTM D 256
Multiaxial Impact	224	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	80	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	25	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	92	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	53	°C	ASTM D 648





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THERMAL			
CTE, -40°C to 40°C, flow	1.04E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.72E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.43E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	1.7E-04	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	95	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	56	°C	ISO 75/Af
PHYSICAL			
Density	1.01	g/cm ³	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	120	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	130	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.3	%	ISO 294
Density	1.01	g/cm ³	ISO 1183
ELECTRICAL			
Volume Resistivity	1.E+04	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+03	Ohm	ASTM D 257
Shielding Effectiveness @ 3mm	50 - 65	dB	SABIC Method





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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Melt Temperature	230 - 250	°C
Front - Zone 3 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	230 - 245	°C
Rear - Zone 1 Temperature	205 - 215	°C
Mold Temperature	30 - 55	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	25 - 50	rpm

