

## LNP\* Faradex\* Compound MS003

Americas: COMMERCIAL

Also known as: MS-1003  
Product Reorder Name: MS003

LNP\* Faradex\* MS003 is a compound based on Polypropylene resin containing Stainless Steel. Added features of this material include:  
Electrically Conductive, EMI/RFI Shielding.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	19	MPa	ASTM D 638
Tensile Stress, break	15	MPa	ASTM D 638
Tensile Strain, yield	6.2	%	ASTM D 638
Tensile Strain, break	88.4	%	ASTM D 638
Tensile Modulus, 50 mm/min	1190	MPa	ASTM D 638
Flexural Stress	27	MPa	ASTM D 790
Flexural Modulus	1190	MPa	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	1300000	MPa	ISO 527
Flexural Stress	32	MPa	ISO 178
Flexural Modulus	1500	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1226	J/m	ASTM D 4812
Izod Impact, notched, 23°C	267	J/m	ASTM D 256
Multiaxial Impact	22	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	80	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	25	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
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
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	Value	Unit	Standard
Density	1.01	g/cm <sup>3</sup>	ASTM D 792

Source GMD, last updated:02/27/2007

### Processing

Parameter	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

Source GMD, last updated:02/27/2007

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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