

## LNP\* Faradex\* Compound PS003E

Americas: COMMERCIAL

Also known as: PS-1003

Product Reorder Name: PS003E

LNP\* Faradex\* PS003E is a compound based on Nylon 6 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	55	MPa	ASTM D 638
Tensile Stress, break	55	MPa	ASTM D 638
Tensile Strain, yield	9.6	%	ASTM D 638
Tensile Strain, break	23	%	ASTM D 638
Tensile Modulus, 50 mm/min	3150	MPa	ASTM D 638
Flexural Stress	82	MPa	ASTM D 790
Flexural Modulus	2310	MPa	ASTM D 790
Tensile Stress, yield	53	MPa	ISO 527
Tensile Stress, break	53	MPa	ISO 527
Tensile Strain, yield	3.3	%	ISO 527
Tensile Strain, break	8.6	%	ISO 527
Tensile Modulus, 1 mm/min	3000	MPa	ISO 527
Flexural Stress	81	MPa	ISO 178
Flexural Modulus	2400	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	389	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	2	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	43	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	186	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	62	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.02E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.56E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	3.95E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	4.28E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	171	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	58	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.22	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	1.3	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	72	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	100	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.72	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	1	%	ISO 294

Density	1.22	g/cm <sup>3</sup>	ISO 1183
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	- 1.E+04	Ohm-cm	ASTM D 257
Surface Resistivity	- 1.E+03	Ohm	ASTM D 257

Source GMD, last updated:12/20/2006

## Processing

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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