

**LNP™ FARADEx™ Compound NS003**

(PC+ABS)-MEF(x)15

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP FARADEx NS003 compound is based on Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend containing 15% stainless steel fiber. Added features of this grade include: Electrically Conductive, EMI/RFI shielding.

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.3	%	ISO 294-4, 2577
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.3	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.35	mm/mm	ASTM D 955

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	2700	MPa	ISO 527
Yield stress	50	MPa	ISO 527
Yield strain	3.5	%	ISO 527
Stress at break	46	MPa	ISO 527
Strain at break	6	%	ISO 527
Flexural modulus	2800	MPa	ISO 178
Flexural strength	86	MPa	ISO 178
Izod impact strength, +23°C, 4mm	32	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	9	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	3100	MPa	ASTM D 638
Tensile Strength at Yield	52	MPa	ASTM D 638
Tensile Strength at Break	49	MPa	ASTM D 638
Elongation at Yield	3.3	%	ASTM D 638
Elongation at Break	4.7	%	ASTM D 638
Flexural Modulus	2990	MPa	ASTM D 790
Flexural Strength	89	MPa	ASTM D 790
Izod Impact notched, 1/8 in	74	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	573	J/m	ASTM D 256

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	103	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	115	°C	ISO 75-1/-2
<b>ASTM Data</b>			
DTUL @ 66 psi	120	°C	ASTM D 648
DTUL @ 264 psi	105	°C	ASTM D 648

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ASTM Data</b>			
Surface Resistivity	1000	Ohm	ASTM D 257
Volume Resistivity	10000	Ohm*cm	ASTM D 257

<b>Other properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Density	1210	kg/m <sup>3</sup>	ISO 1183
Water Absorption, 24hr	0.1	%	ASTM D 570
Density	1240	kg/m <sup>3</sup>	ASTM D 792

<b>Processing Recommendation Injection Molding</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	220 - 260	°C	-
Mold temperature	40 - 80	°C	-

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Zone 1	<b>220 - 230</b>	°C	-
Zone 2	<b>230 - 245</b>	°C	-
Zone 3	<b>245 - 255</b>	°C	-
Screw speed	<b>30 - 60</b>	rpm	-
Back pressure	<b>0.2 - 0.3</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Features**

EMI Attenuation/Shielding

**Special Characteristics**

Increased electrical conductivity

**Regional Availability**

North America, Europe, Asia Pacific