

LNP™ FARADEX™ NS003 compound

Polycarbonate + ABS

SABIC Innovative Plastics

Message:

LNP FARADEX NS003 is a compound based on PC+ABS Blend resin containing Stainless Steel. Added features of this material include: Electrically Conductive, EMI/RFI Shielding.

Also known as: LNP* FARADEX* Compound PCA-S-1003

Product reorder name: NS003

General Information			
Filler / Reinforcement	Stainless steel fiber		
Features	Conductivity		
	Electromagnetic shielding (EMI)		
	Radio frequency shielding (RFI)		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.24	g/cm ³	ASTM D792
--	1.21	g/cm ³	ISO 1183
Molding Shrinkage			
Flow: 24 hours	0.30	%	ASTM D955
Transverse flow: 24 hours	0.35	%	ASTM D955
Vertical flow direction: 24 hours	0.35	%	ISO 294-4
Flow direction: 24 hours	0.30	%	ISO 294-4
Water Absorption (24 hr, 50% RH)	0.10	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ¹	3110	MPa	ASTM D638
--	2700	MPa	ISO 527-2/1
Tensile Strength			
Yield	52.4	MPa	ASTM D638
Yield	50.0	MPa	ISO 527-2
Fracture	49.6	MPa	ASTM D638
Fracture	46.0	MPa	ISO 527-2
Tensile Elongation			
Yield	3.3	%	ASTM D638
Yield	3.5	%	ISO 527-2
Fracture	4.7	%	ASTM D638
Fracture	6.0	%	ISO 527-2
Flexural Modulus			

--	2990	MPa	ASTM D790
--	2800	MPa	ISO 178
Flexural Strength			
--	89.6	MPa	ASTM D790
--	86.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	75	J/m	ASTM D256
23°C ²	9.5	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	570	J/m	ASTM D4812
23°C ³	32	kJ/m ²	ISO 180/1U
Instrumented Dart Impact (23°C, Energy at Peak Load)	15.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, unannealed, 3.20mm	120	°C	ASTM D648
0.45 MPa, unannealed, 64.0mm span ⁴	115	°C	ISO 75-2/Bf
1.8 MPa, unannealed, 3.20mm	105	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span ⁵	103	°C	ISO 75-2/Af
Linear thermal expansion coefficient			
Flow: -40 to 40°C	7.7E-5	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	5.9E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	6.3E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	8.2E-5	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	10 - 1.0E+3	ohms	ASTM D257
Volume Resistivity	1.0E+4	ohms · cm	ASTM D257
Shielding Effectiveness (3.00 mm)	50 - 65	dB	Internal method
Injection	Nominal Value	Unit	
Drying Temperature	82.2	°C	
Drying Time	4.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	221 - 232	°C	
Middle Temperature	232 - 243	°C	
Front Temperature	243 - 254	°C	
Processing (Melt) Temp	221 - 260	°C	
Mold Temperature	37.8 - 82.2	°C	
Back Pressure	0.172 - 0.344	MPa	
Screw Speed	30 - 60	rpm	
NOTE			
1.	50 mm/min		

2.	80*10*4
3.	80*10*4
4.	80*10*4 mm
5.	80*10*4 mm

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

