

LNP Faradex* AS-1002

Acrylonitrile Butadiene Styrene
SABIC Innovative Plastics Asia Pacific



Prospector

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific		
Filler / Reinforcement	• Stainless Steel Fiber		
Features	• Electrically Conductive	• Electromagnetic Shielding (EMI)	• Radio Frequency Shielding (RFI)
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	1.12	g/cm ³	ASTM D792A
--	1.11	g/cm ³	ISO 1183
Molding Shrinkage			
Flow: 24 hr	18	%	ASTM D955
Across Flow: 24 hr	27	%	ASTM D955
Across Flow: 24 hr	0.27	%	ISO 294-4
Flow: 24 hr	0.18	%	ISO 294-4
Water Absorption (24 hr)	0.20	%	ASTM D570

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
--	3000	MPa	ASTM D638
--	2500	MPa	ISO 527-2
Tensile Strength			
Yield	42.7	MPa	ASTM D638
Yield	39.0	MPa	ISO 527-2
Break	39.3	MPa	ASTM D638
Break	37.0	MPa	ISO 527-2
Tensile Elongation			
Yield	2.2	%	ASTM D638
			ISO 527-2
Break	8.6	%	ASTM D638
Break	3.3	%	ISO 527-2
Flexural Modulus			
--	2820	MPa	ASTM D790
--	2500	MPa	ISO 178
Flexural Strength			
--	75.8	MPa	ASTM D790
--	66.0	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
3.18 mm	58.7	J/m	ASTM D256
--	7.50	kJ/m ²	ISO 180
Unnotched Izod Impact			
3.18 mm	286	J/m	ASTM D256
--	20.0	kJ/m ²	ISO 180
Instrumented Dart Impact	11.9	J	ASTM D3763

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	97.2	°C	ASTM D648
0.45 MPa, Unannealed	91.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	87.8	°C	ASTM D648
1.8 MPa, Unannealed	78.0	°C	ISO 75-2/A

CLTE			
Flow	0.000079	cm/cm/°C	ASTM E831
Flow	0.000078	cm/cm/°C	ISO 11359-2
Transverse	0.000076	cm/cm/°C	ASTM E831
Transverse	0.000096	cm/cm/°C	ISO 11359-2

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0 to 1.0E+5	ohms	ASTM D4496
Volume Resistivity	1.0E+6	ohm·cm	ASTM D257

Additional Information
EMI Shielding Effect, ASTM D4935-99: 40 to 55 DB
Volume Resistivity, ASTM D257: 1e2 to 1e6 ohm-cm

Injection	Nominal Value	Unit
Drying Temperature	82.2	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Processing (Melt) Temp	238 to 254	°C
Mold Temperature	71.1 to 93.3	°C
Back Pressure	0.172 to 0.345	MPa

Notes

¹ Typical properties: these are not to be construed as specifications.