

LNP™ FARADEX™ COMPOUND DS0036I

DS-1003 FR HI
REGION EUROPE

DESCRIPTION

LNP FARADEX DS0036I is a compound based on Polycarbonate resin containing 15% Stainless Steel. Added features of this material include: Electrically Conductive, EMI/RFI Shielding, High Impact, Non-Brominated & Non-Chlorinated Flame Retardant.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	59	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	53	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.3	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5.1	%	ASTM D 638
Tensile Modulus, 5 mm/min	2550	MPa	ASTM D 638
Tensile Stress, yield, 5 mm/min	57	MPa	ISO 527
Tensile Stress, break, 5 mm/min	55	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	3.8	%	ISO 527
Tensile Strain, break, 5 mm/min	4 – 8	%	ISO 527
Tensile Modulus, 1 mm/min	2500	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	80	MPa	ISO 178
Flexural Modulus, 2 mm/min	2600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1790	J/m	ASTM D 4812
Izod Impact, notched, 23°C	125	J/m	ASTM D 256
Multiaxial Impact	29	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	70	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	10	kJ/m ²	ISO 180/1A
THERMAL			
CTE, 23°C to 60°C, flow	5.7E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	6.8E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	136	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	125	°C	ISO 75/Af

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.4 – 0.7	%	SABIC method
Mold Shrinkage, xflow, 24 hrs (5)	0.4 – 0.6	%	ISO 294
Density	1.29	g/cm ³	ISO 1183
Water Absorption, 23°C/24hrs	0.13	%	ISO 62-1
ELECTRICAL			
Volume Resistivity	10000 – 1000000	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+02 – 1.E+04	Ohm	ASTM D 257
Static Decay, 5000V to <50V	0.01	< seconds	FTMS101B
Shielding Effectiveness @ 3mm	40 – 55	dB	SABIC method
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	2	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	95 – 120	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.