

# LNP<sup>TM</sup> FARADEX<sup>TM</sup> COMPOUND DS0026I

DS0026I

## DESCRIPTION

LNP<sup>TM</sup> FARADEX<sup>TM</sup> DS0026I is a compound based on Polycarbonate resin containing Stainless Steel Fiber. Added features of this grade include: High Impact, Flame Retardant, Non-Brominated & Non-Chlorinated Flame Retardant, EMI/RFI Shielding.

## TYPICAL PROPERTY VALUES

Revision 20191216

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	60	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	48	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	7.8	%	ASTM D 638
Tensile Modulus, 5 mm/min	2780	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2510	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	56	MPa	ISO 527
Tensile Stress, break, 5 mm/min	49	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4.2	%	ISO 527
Tensile Strain, break, 5 mm/min	5.4	%	ISO 527
Tensile Modulus, 1 mm/min	2490	MPa	ISO 527
Flexural Stress	87	MPa	ISO 178
Flexural Modulus, 2 mm/min	2410	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, unnotched, 23°C	NB	J/m	ASTM D 4812
Izod Impact, notched, 23°C	153	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	116	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	12	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL</b>			
HDT, 1.82 MPa, 3.2mm, unannealed	130	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.4E-05	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	138	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	129	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(1)</sup>	80	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(1)</sup>	80	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(1)</sup>	80	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.26	-	ASTM D 792
Density	1.26	g/cm <sup>3</sup>	ASTM D 792
Mold Shrinkage, flow, 24 hrs	0.78	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1	%	ASTM D 955
<b>ELECTRICAL</b>			
Volume Resistivity	1.41E+03	Ohm-cm	ASTM D 257

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Surface Resistivity	2.3E+01	Ohm	ASTM D 257
Static Decay	0.01	sec	NFPA/MIL B-81705-D
<b>FLAME CHARACTERISTICS <sup>(1)</sup></b>			
UL Yellow Card Link	<a href="#">E121562-102158629</a>	-	-
UL Recognized, 94V-0 Flame Class Rating	≥2	mm	UL 94
UL Recognized, 94V-1 Flame Class Rating	≥1.6	mm	UL 94
<b>INJECTION MOLDING</b>			
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	

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

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