LNP™ FARADEX™ COMPOUND DS0036IP

DS-1003 FR HI

DESCRIPTION

LNP FARADEX DS0036IP 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 20200213

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yield	57	MPa	ISO 527
Tensile Stress, break	55	MPa	ISO 527
Tensile Strain, yield	3.8	%	ISO 527
Tensile Strain, break	4 – 8	%	ISO 527
Tensile Modulus, 1 mm/min	2800	MPa	ISO 527
Flexural Stress	80	MPa	ISO 178
Flexural Modulus	2600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1788	J/m	ASTM D 4812
Izod Impact, notched, 23°C	122	J/m	ASTM D 256
Izod Impact, unnotched 80*10*4 +23°C	85	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	11	kJ/m²	ISO 180/1A
THERMAL			
CTE, -40°C to 40°C, flow	6.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.6E-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
Relative Temp Index, Elec [1]	80	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	110	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	115	°C	UL 746B
PHYSICAL			
Mold Shrinkage, flow, 24 hrs	0.4 – 0.7	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.5	%	ISO 294
Density	1.29	g/cm³	ISO 1183
ELECTRICAL			
Volume Resistivity	1.E+04	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+02 – 1.E+03	Ohm	ASTM D 257
Shielding Effectivness @ 3mm	40 – 55	dB	SABIC method
FLAME CHARACTERISTICS [1]			
UL Yellow Card Link	E45329-101343783	-	-
UL Yellow Card Link 2	E45329-101343784	-	-
UL Recognized, 94-5VA Flame Class Rating	≥3	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating	≥2	mm	UL 94

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
UL Recognized, 94V-1 Flame Class Rating	≥1.6	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
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	

(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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