

LNPTM FARADExTM COMPOUND NX07344

DESCRIPTION

Faradex NX07344 is a compound based on PC+ABS blend resin containing non-brominated and non-chlorinated flame retardant system, Stainless Steel and glass fiber. Added features of this material include: EMI/RFI Shielding and ESD.

TYPICAL PROPERTY VALUES

Revision 20200313

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	60	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	6000	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5300	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	62	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.8	%	ISO 527
Tensile Modulus, 1 mm/min	5800	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	105	MPa	ISO 178
Flexural Strain, break, 2 mm/min	2.8	%	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	350	J/m	ASTM D 4812
Izod Impact, unnotched, -30°C	330	J/m	ASTM D 4812
Izod Impact, notched, 23°C	60	J/m	ASTM D 256
Izod Impact, notched, -30°C	44	J/m	ASTM D 256
Multiaxial Impact	4	J	ISO 6603
Instrumented Impact Total Energy, 23°C	11	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	21	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	21	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	6	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	7	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate A/50	101	°C	ASTM D 1525
Vicat Softening Temp, Rate B/50	105	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	94	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	96	°C	ASTM D 648
CTE, -40°C to 40°C, flow	3.1E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.8E-05	1/°C	ASTM E 831
CTE, 23°C to 60°C, flow	2.9E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.4E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50	102	°C	ISO 306
Vicat Softening Temp, Rate B/120	105	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	96	°C	ISO 75/Af

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Relative Temp Index, Elec ⁽¹⁾	60	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽¹⁾	60	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽¹⁾	60	°C	UL 746B
PHYSICAL			
Density	1.46	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.08	%	ASTM D 570
Mold Shrinkage, flow	0.38	%	SABIC method
Mold Shrinkage, xflow	0.46	%	SABIC method
Density	1.46	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
ELECTRICAL			
Volume Resistivity	1.E+04 – 1.E+06	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+03 – 1.E+06	Ohm	ASTM D 257
Static Decay, 5000V to <50V	0.01	< seconds	FTMS101B
Shielding Effectiveness @ 1.5mm	47 – 53	dB	SABIC method
Shielding Effectiveness @ 3mm	60 – 70	dB	SABIC method
FLAME CHARACTERISTICS ⁽¹⁾			
UL Yellow Card Link	E207780-101282735	-	-
UL Recognized, 94V-0 Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	85 – 90	°C	
Drying Time	3 – 4	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	270 – 300	°C	
Nozzle Temperature	265 – 300	°C	
Front - Zone 3 Temperature	265 – 300	°C	
Middle - Zone 2 Temperature	260 – 300	°C	
Rear - Zone 1 Temperature	260 – 300	°C	
Mold Temperature	60 – 100	°C	
Back Pressure	4	MPa	
Screw Speed	30 – 100	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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