LNP™ FARADEX™ Compound NX07344
Asia Pacific: COMMERCIAL

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 PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	0	kgf/cm²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	610	kgf/cm²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	0	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	61100	kgf/cm²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	910	kgf/cm²	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	910	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	54000	kgf/cm²	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	35	cm-kgf/cm	ASTM D 4812
Izod Impact, unnotched, -30°C	33	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	6	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	4	cm-kgf/cm	ASTM D 256
Multiaxial Impact	43	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	117	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	21	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	21	kJ/m²	ISO 180/1U

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
IMPACT			
Izod Impact, notched 80*10*4 +23°C	6	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	5	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	7	kJ/m²	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
PHYSICAL			
Density	1.46	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.08	%	ASTM D 570
Mold Shrinkage, flow (5)	0.38	%	SABIC Method
Mold Shrinkage, xflow (5)	0.46	%	SABIC Method
Density	1.46	g/cm³	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

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
ELECTRICAL			
Shielding Effectivness @ 1.5mm	47 - 53	dB	SABIC Method
Shielding Effectivness @ 3mm	60 - 70	dB	SABIC Method
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
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

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