LNP™ FARADEX™ 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 20191216

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/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	21	kJ/m²	ISO 180/1U
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

© 2019 Copyright by SABIC. All rights reserved

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/cm³	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/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.04	%	ISO 62
ELECTRICAL			
Volume Resistivity	10000 – 1000000	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 Effectivness @ 1.5mm	47 – 53	dB	SABIC method
Shielding Effectivness @ 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.

DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

© 2019 Copyright by SABIC. All rights reserved