LNP™ VERTON™ COMPOUND RV00CESS

RF-700-12 EM HS

DESCRIPTION

LNP VERTON* RV00CESS is a compound based on Nylon 66 resin containing 60% Long Glass Fiber. Added features of this material include: Easy Molding, Heat Stabilized, Structural.

TYPICAL PROPERTY VALUES

Revision 20190312

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	270	MPa	ASTM D 638
Tensile Strain, break	1.6	%	ASTM D 638
Tensile Modulus, 50 mm/min	19650	MPa	ASTM D 638
Flexural Stress	430	MPa	ASTM D 790
Flexural modulus	18020	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	281	MPa	ISO 527
Tensile Stress, break, 5 mm/min	279	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	1.7	%	ISO 527
Tensile Strain, break, 5 mm/min	1.7	%	ISO 527
Tensile Modulus, 1 mm/min	22450	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	418	MPa	ISO 178
Flexural Strain, break, 2 mm/min	3	%	ISO 178
Flexural Modulus, 2 mm/min	19000	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	411	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	18	J	ASTM D 3763
Multiaxial Impact	18	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	100	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	53	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	43	kJ/m²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	247	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.76E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.36E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.7E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.3E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	254	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Af
Relative Temp Index, Elec [1]	65	°C	UL 746B
Relative Temp Index, Mech w/impact [1]	65	°C	UL 746B
Relative Temp Index, Mech w/o impact [1]	65	°C	UL 746B
PHYSICAL			
Density	1.71	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.44	%	ASTM D 570

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.4	%	ISO 294
Density	1.71	g/cm³	ISO 1183
Water Absorption, 23°C/24hrs	0.9	%	ISO 62-1
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	E45329-101344687	-	-
UL Recognized, 94HB Flame Class Rating	≥0.8	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.15 – 0.25	%	
Melt Temperature	290 – 305	°C	
Front - Zone 3 Temperature	290 – 300	°C	
Middle - Zone 2 Temperature	290 – 300	°C	
Rear - Zone 1 Temperature	280 – 295	°C	
Mold Temperature	95 – 110	°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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