

# LNPT<sup>™</sup> VERTON<sup>™</sup> COMPOUND RV00CESS

RF-700-12 EM HS

## DESCRIPTION

LNP VERTON RV00CESS is a compound based on Polyamide 66 (Nylon 66) resin containing 60% long glass fiber. Added features include Easy Molding, Heat Stabilized and Structural.

GENERAL INFORMATION	
Features	Good Processability, Heat Stabilized, High stiffness/Strength, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding
Regional Availability	Global

  

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Exteriors
Building and Construction	Building Component
Consumer	Home Appliances, Commercial Appliance
Industrial	Electrical, Industrial General

## TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	270	MPa	ASTM D638
Tensile Strain, break	1.6	%	ASTM D638
Tensile Modulus, 50 mm/min	19650	MPa	ASTM D638
Flexural Stress	430	MPa	ASTM D790
Flexural modulus	18020	MPa	ASTM D790
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
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	411	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	18	J	ASTM D3763
Multiaxial Impact	18	J	ISO 6603
Izod Impact, unnotched 80°10°4 +23°C	100	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	53	kJ/m <sup>2</sup>	ISO 180/1A

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Izod Impact, notched 80*10*4 -40°C	43	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 1.82 MPa, 3.2mm, unannealed	247	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.76E-05	1/°C	ASTM E83 1
CTE, -40°C to 40°C, xflow	5.36E-05	1/°C	ASTM E83 1
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 <sup>(2)</sup>	65	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	65	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	65	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.71	g/cm <sup>3</sup>	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.44	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(3)</sup>	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs <sup>(3)</sup>	0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs <sup>(3)</sup>	0.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(3)</sup>	0.4	%	ISO 294
Density	1.71	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/24hrs)	0.9	%	ISO 62-1
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<a href="https://www.ul.com/Products/45329-101344687">E45329-101344687</a>	-	-
UL Recognized, 94HB Flame Class Rating	≥0.8	mm	UL 94
<b>INJECTION MOLDING <sup>(4)</sup></b>			
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) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) 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. The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(4) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

## ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

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