

# LNPT<sup>™</sup> VERTON<sup>™</sup> COMPOUND RX06422

RF-700-10 EM HS UV

## DESCRIPTION

LNP VERTON RX06422 is a compound based on Polyamide 66 (Nylon 66) resin containing 50% long glass fiber. Added features include Easy Molding, Heat Stabilized, UV Stabilized and Structural.

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

  

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

## TYPICAL PROPERTY VALUES

Revision 20231127

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break	254	MPa	ASTM D638
Tensile Strain, break	1.9	%	ASTM D638
Tensile Modulus, 5 mm/min	16890	MPa	ASTM D638
Flexural Stress	374	MPa	ASTM D790
Flexural Modulus	14160	MPa	ASTM D790
Tensile Stress, break	256	MPa	ISO 527
Tensile Strain, break	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	18380	MPa	ISO 527
Flexural Stress	370	MPa	ISO 178
Flexural Modulus	15550	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched, 23°C	384	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	15	J	ASTM D3763
Multiaxial Impact	15	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	89	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	45	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	38	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
HDT, 1.82 MPa, 3.2mm, unannealed	241	°C	ASTM D648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.85E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	6.73E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	1.86E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.73E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	253	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(2)</sup>	105	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	110	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	110	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Density	1.58	g/cm <sup>3</sup>	ASTM D792
Mold Shrinkage, flow, 24 hrs <sup>(3)</sup>	0.3	%	ISO 294
Mold Shrinkage, xflow, 24 hrs <sup>(3)</sup>	0.8	%	ISO 294
Density	1.58	g/cm <sup>3</sup>	ISO 1183
<b>ELECTRICAL <sup>(2)</sup></b>			
Hot-Wire Ignition (HWI), PLC 0	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥1.5	mm	UL 746A
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<a href="#">E45329 - 104432357</a>	-	-
UL Recognized, 94HB Flame Class Rating <sup>(2)</sup>	≥1.5	mm	UL 94
UV-light, water exposure/immersion	F1	-	UL 746C
<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.

(4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

## 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 NON-INFRINGEMENT 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.