

LNPT[™] VERTON[™] COMPOUND RV007ESS

DESCRIPTION

LNP VERTON RV007ESS is a compound based on Polyamide 66 (Nylon 66) resin containing 35% long glass fiber. Added features include Easy Molding, Structural and Heat Stabilized.

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

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 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	204	MPa	ASTM D638
Flexural Modulus	9880	MPa	ASTM D790
Tensile Stress, break	214	MPa	ISO 527
Tensile Strain, break	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	11970	MPa	ISO 527
Flexural Stress	309	MPa	ISO 178
Flexural Modulus	10240	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	277	J/m	ASTM D256
Izod Impact, notched 80°10°4 +23°C	29	kJ/m ²	ISO 180/1A
Izod Impact, notched 80°10°4 -40°C	25	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	245	°C	ASTM D648
HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm	252	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	95	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	65	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	75	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.42	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.97	%	ASTM D570
Density	1.42	g/cm ³	ISO 1183

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
ELECTRICAL ⁽¹⁾			
Hot-Wire Ignition (HWI), PLC 0	≥3	mm	UL 746A
Hot-Wire Ignition (HWI), PLC 3	≥1.5	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥1.5	mm	UL 746A
High Voltage Arc Track Rate {PLC}	0	PLC Code	UL 746A
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D495
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	<u>E45329-101282651</u>	-	-
UL Yellow Card Link 2	<u>E45329-101344688</u>	-	-
UL Recognized, 94HB Flame Class Rating	≥0.75	mm	UL 94
INJECTION MOLDING ⁽³⁾			
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) 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.

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