

LNPT[™] VERTON[™] COMPOUND RVO0CES

RF-700-12 EM HS

DESCRIPTION

LNP VERTON RVO0CES 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

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

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	270	MPa	ASTM D638
Tensile Strain, break	1.6	%	ASTM D638
Tensile Modulus, 5 mm/min	19650	MPa	ASTM D638
Flexural Stress	430	MPa	ASTM D790
Flexural Modulus	18020	MPa	ASTM D790
Tensile Stress, break	261	MPa	ISO 527
Tensile Strain, break	1.6	%	ISO 527
Tensile Modulus, 1 mm/min	23280	MPa	ISO 527
Flexural Stress	433	MPa	ISO 178
Flexural Modulus	18920	MPa	ISO 178
IMPACT ⁽¹⁾			
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	102	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	54	kJ/m ²	ISO 180/1A
Izod Impact, notched 80°10°4 -40°C	43	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 3.2mm, unannealed	247	°C	ASTM D648
CTE, -40°C to 40°C, flow	1.76E-05	1/°C	ASTM E831

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	5.36E-05	1/°C	ASTM E831
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	252	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	252	°C	ISO 75/Af
PHYSICAL ⁽¹⁾			
Density	1.71	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.44	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.4	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽²⁾	0.2	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽²⁾	0.4	%	ISO 294
Density	1.71	g/cm ³	ISO 1183
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) 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.

(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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