LNP™ VERTON™ COMPOUND RV008ES

RF-7008 EM HS

DESCRIPTION

LNP VERTON RV008ES is a compound based on Polyamide 66 (Nylon 66) resin containing 40% 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	Electrical, Industrial General

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL [1]			
Tensile Stress, yield	86.5	MPa	ASTM D638
Tensile Stress, break	130	MPa	ASTM D638
Tensile Strain, yield	0.7	%	ASTM D638
Tensile Strain, break	1.2	%	ASTM D638
Flexural Stress	310	MPa	ASTM D790
Flexural Modulus	10500	MPa	ASTM D790
Tensile Stress, break, 5 mm/min	223	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	14100	MPa	ISO 527
Flexural Stress	322	MPa	ISO 178
Flexural Modulus, 2 mm/min	10700	MPa	ISO 178
IMPACT [1]			
Izod Impact, unnotched, 23°C	1072	J/m	ASTM D4812
Izod Impact, notched, 23°C	273	J/m	ASTM D256
Izod Impact, unnotched 80*10*4 +23°C	72	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	26	kJ/m²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	26	kJ/m²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	93	kJ/m²	ISO 179/1eU
THERMAL [1]			
CTE, 23°C to 80°C, flow	2.00E-05	1/°C	ISO 11359-2

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, 23°C to 80°C, xflow	1.30E-04	1/°C	ISO 11359-2
CTE, -40°C to 40°C, flow	2.10E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.10E-05	1/°C	ISO 11359-2
HDT, 0.45 MPa, 3.2 mm, unannealed	257	°C	ASTM D648
Vicat Softening Temp, Rate B/120	250	°C	ISO 306
HDT, 1.82 MPa, 3.2mm, unannealed	252	°C	ASTM D648
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	251	°C	ISO 75/Af
PHYSICAL (1)			
Mold Shrinkage, flow (2)	0.1 – 0.3	%	SABIC method
Mold Shrinkage, xflow (2)	0.4 – 0.6	%	SABIC method
Water Absorption, (23°C/24hrs)	1.2	%	ISO 62-1
Moisture Absorption, (23°C/50% RH/24 hrs)	0.1	%	ASTM D570
Density	1.46	g/cm³	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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