

LNP Verton* RF-700-12 EM HS

SABIC Innovative Plastics Asia Pacific - Polyamide 66

General Information

General

Filler / Reinforcement	• Long Glass Fiber
Additive	• Heat Stabilizer
Features	• Good Moldability • Heat Stabilized
Forms	• Pellets
Processing Method	• Injection Molding

ASTM and ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity (Method A)	1.71	1.71	ASTM D792
Density	1.71 g/cm ³	1.71 g/cm ³	ISO 1183
Molding Shrinkage (Flow, 24 hr)	0.0020 in/in	0.20 %	ASTM D955
Molding Shrinkage (Across Flow, 24 hr)	0.0040 in/in	0.40 %	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow, 24 hr	0.40 %	0.40 %	
Flow, 24 hr	0.20 %	0.20 %	
Water Absorption (24 hr)	0.40 %	0.40 %	ASTM D570
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	2.85E+6 psi	19700 MPa	ASTM D638
Tensile Modulus	3.38E+6 psi	23300 MPa	ISO 527-1, -2
Tensile Strength (Break)	39200 psi	270 MPa	ASTM D638
Tensile Stress (Break)	37900 psi	261 MPa	ISO 527-1, -2
Tensile Elongation (Break)	1.6 %	1.6 %	ASTM D638
Tensile Strain (Break)	1.6 %	1.6 %	ISO 527-1, -2
Flexural Modulus	2.62E+6 psi	18000 MPa	ASTM D790
Flexural Modulus	2.74E+6 psi	18900 MPa	ISO 178
Flexural Strength	41000 psi	283 MPa	ASTM D790
Flexural Strength	62800 psi	433 MPa	ISO 178

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Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (0.125 in (3.18 mm))	7.70 ft-lb/in	411 J/m	ASTM D256
Notched Izod Impact Strength			ISO 180
--	25.8 ft-lb/in ²	54.2 kJ/m ²	
-40 °F (-40 °C)	20.6 ft-lb/in ²	43.3 kJ/m ²	
Unnotched Izod Impact Strength	48.5 ft-lb/in ²	102 kJ/m ²	ISO 180
Instrumented Dart Impact	159 in-lb	18.0 J	ASTM D3763
Multi-Axial Instrumented Impact Energy	13.3 ft-lb	18.0 J	ISO 6603-2

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Heat Deflection Temperature			ISO 75B-1, -2
66 psi (0.45 MPa), Unannealed	486 °F	252 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Unannealed	477 °F	247 °C	
Heat Deflection Temperature			ISO 75A-1, -2
264 psi (1.8 MPa), Unannealed	486 °F	252 °C	
CLTE, Flow (TMA)	9.0E-6 in/in/°F	0.000016 cm/cm/°C	ASTM E831
Coefficient of Linear Thermal Expansion, Flow			ISO 11359-1, -2
--	9.4E-6 in/in/°F	0.000017 cm/cm/°C	
CLTE, Transverse (TMA)	0.000029 in/in/°F	0.000052 cm/cm/°C	ASTM E831
Coefficient of Linear Thermal Expansion, Transverse			ISO 11359-1, -2
--	0.000029 in/in/°F	0.000053 cm/cm/°C	

Processing Information		
Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	180 °F	82.2 °C
Drying Time	4.0 hr	4.0 hr
Suggested Max Moisture	0.20 %	0.20 %
Processing (Melt) Temp	535 to 565 °F	279 to 296 °C
Mold Temperature	200 to 225 °F	93.3 to 107 °C
Back Pressure	25.0 to 50.0 psi	0.172 to 0.345 MPa

Notes

¹ Typical properties: these are not to be construed as specifications.