

LNP* Verton* RV004ESV_GY7E070

Polyamide 66

SABIC Innovative Plastics



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Technical Data

Product Description

Preliminary data for 20% long glass fiber filled, single pellet color gray, PA66

General

Material Status	• Commercial: Active
Literature ¹	• Technical Datasheet
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP* Verton*
Availability	• North America
Filler / Reinforcement	• Long Glass Fiber, 20% Filler by Weight
Appearance	• Grey
Processing Method	• Injection Molding

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.30 g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage		ASTM D955
Flow: 24 hr	0.37 to 0.57 %	
Across Flow: 24 hr	1.0 to 1.2 %	
Water Absorption		
24 hr, 50% RH	0.85 %	ASTM D570
Equilibrium, 23°C, 50% RH	1.2 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
-- ³	6920 MPa	ASTM D638
--	6230 MPa	ISO 527-2/1
Tensile Strength		
Yield ⁴	118 MPa	ASTM D638
Yield	125 MPa	ISO 527-2/5
Break ⁴	118 MPa	ASTM D638
Break	125 MPa	ISO 527-2/5
Tensile Elongation		
Yield ⁴	2.1 %	ASTM D638
Yield	2.3 %	ISO 527-2/5
Break ⁴	2.1 %	ASTM D638
Break	2.3 %	ISO 527-2/5
Flexural Modulus		
50.0 mm Span ⁵	6540 MPa	ASTM D790
-- ⁶	5570 MPa	ISO 178
Flexural Strength		
-- ^{6, 7}	184 MPa	ISO 178
Break, 50.0 mm Span ⁵	180 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
-40°C	95 J/m	ASTM D256
23°C	95 J/m	ASTM D256
-40°C ⁸	9.5 kJ/m ²	ISO 180/1A
23°C ⁸	9.8 kJ/m ²	ISO 180/1A

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Impact	Nominal Value Unit	Test Method
Unnotched Izod Impact		
23°C	600 J/m	ASTM D4812
-40°C ⁸	38 kJ/m ²	ISO 180/1U
23°C ⁸	42 kJ/m ²	ISO 180/1U
Instrumented Dart Impact		ASTM D3763
23°C, Energy at Peak Load	5.78 J	
23°C, Total Energy	8.12 J	
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	261 °C	ASTM D648
0.45 MPa, Unannealed, 64.0 mm Span ⁹	261 °C	ISO 75-2/Bf
1.8 MPa, Unannealed, 3.20 mm	255 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁹	255 °C	ISO 75-2/Af
CLTE		ASTM E831
Flow: -30 to 30°C	0.000043 cm/cm/°C	
Transverse: -30 to 30°C	0.000076 cm/cm/°C	
Injection	Nominal Value Unit	
Drying Temperature	80.0 °C	
Drying Time	4.0 hr	
Suggested Max Moisture	0.15 to 0.25 %	
Rear Temperature	280 to 295 °C	
Middle Temperature	290 to 300 °C	
Front Temperature	290 to 300 °C	
Processing (Melt) Temp	290 to 305 °C	
Mold Temperature	95.0 to 110 °C	
Back Pressure	0.150 to 0.300 MPa	
Screw Speed	30 to 60 rpm	

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ 50 mm/min

⁴ Type I, 5.0 mm/min

⁵ 1.3 mm/min

⁶ 2.0 mm/min

⁷ Break

⁸ 80*10*4

⁹ 80*10*4 mm

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Where to Buy

Supplier

SABIC Innovative Plastics

Pittsfield, MA USA

Telephone: 800-845-0600

Web: <http://www.sabic-ip.com/>

Distributor

Nexeo Solutions

Telephone: 800-531-7106

Web: <http://www.nexeosolutions.com/>

Availability: North America



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– Kevin Chase, Owner & President, Chase Plastics



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