SABIC Innovative Plastics™

LNP* Verton* Compound RV008ESV_GY7E072 Americas: COMMERCIAL

Preliminary data for 40% long glass fiber filled, single color pellet gray, PA66

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	184	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	182	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Modulus, 50 mm/min	11560	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	273	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	11300	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	195	MPa	ISO 527
Tensile Stress, break, 5 mm/min	195	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.3	%	ISO 527
Tensile Strain, break, 5 mm/min	2.3	%	ISO 527
Tensile Modulus, 1 mm/min	10440	MPa	ISO 527
Flexural Stress, break, 2 mm/min	276	MPa	ISO 178
Flexural Modulus, 2 mm/min	10190	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1080	J/m	ASTM D 4812
Izod Impact, notched, 23°C	246	J/m	ASTM D 256
Izod Impact, notched, -40°C	223	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	7	J	ASTM D 3763
Instrumented Impact Total Energy, 23°C	16	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	71	kJ/m²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -40°C	69	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	15	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	27	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	259	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	255	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.32E-05	1/°C	ASTM E 831
CTE, -30°C to 30°C, xflow	5.83E-05	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	260	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	256	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.485	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.93	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.23 - 0.43	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.9 - 1.1	%	ASTM D 955
Density	1.48	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.65	%	ISO 62

Source GMD, last updated:10/30/2008

Processing

Parameter Injection Molding	Value	Unit
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

Source GMD, last updated:10/30/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.