SABIC Innovative Plastics™

Valox* Resin 732E

Americas: COMMERCIAL

30% glass/mineral reinforced, excellent thermal performance, low shrinkage and warp. Easy flow.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	82	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2	%	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	124	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6890	MPa	ASTM D 790
Hardness, Rockwell R	109	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	534	J/m	ASTM D 4812
Izod Impact, notched, 23°C	101	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	215	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	198	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.52E-05	1/°C	ASTM E 831
CTE, 60°C to 138°C, flow	2.52E-05	1/°C	ASTM E 831
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.51	-	ASTM D 792
Specific Volume	0.66	cm³/g	ASTM D 792
Water Absorption, 24 hours	0.07	%	ASTM D 570
Mold Shrinkage, flow, 1.5-3.2 mm	0.3 - 0.4	%	SABIC Method
Mold Shrinkage, flow, 3.2-4.6 mm	0.4 - 0.6	%	SABIC Method
Mold Shrinkage, xflow, 1.5-3.2 mm	0.4 - 0.6	%	SABIC Method
Mold Shrinkage, xflow, 3.2-4.6 mm	0.6 - 0.8	%	SABIC Method
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	1.E+17	Ohm-cm	ASTM D 257
Dielectric Strength, in oil, 3.2 mm	17.9	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	3.53	-	ASTM D 150
Relative Permittivity, 1 MHz	3.32	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.008	-	ASTM D 150
Dissipation Factor, 1 MHz	0.013	-	ASTM D 150

Source GMD, last updated:12/29/1999

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	12	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 275	°C
Nozzle Temperature	255 - 270	°C

Front - Zone 3 Temperature	255 - 265	°C
Middle - Zone 2 Temperature	250 - 260	°C
Rear - Zone 1 Temperature	245 - 255	°C
Mold Temperature	65 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 80	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.025 - 0.038	mm

Source GMD, last updated:12/29/1999

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.