

VALOX™ RESIN 732E

REGION AMERICAS

DESCRIPTION

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

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
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			
Izod Impact, unnotched, 23°C	534	J/m	ASTM D 4812
Izod Impact, notched, 23°C	101	J/m	ASTM D 256
THERMAL			
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			
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 (5)	0.3 – 0.4	%	SABIC method
Mold Shrinkage, flow, 3.2-4.6 mm (5)	0.4 – 0.6	%	SABIC method
Mold Shrinkage, xflow, 1.5-3.2 mm (5)	0.4 – 0.6	%	SABIC method
Mold Shrinkage, xflow, 3.2-4.6 mm (5)	0.6 – 0.8	%	SABIC method
ELECTRICAL			
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

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Dissipation Factor, 1 MHz	0.013	-	ASTM D 150
INJECTION MOLDING			
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	

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