

VALOX™ RESIN EH7020

REGION AMERICAS

DESCRIPTION

MINERAL FILLED, METALLIZABLE

TYPICAL PROPERTY VALUES

Revision 20170913

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	57	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	103	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4130	MPa	ASTM D 790
IMPACT			
Izod Impact, unnotched, 23°C	389	J/m	ASTM D 4812
Izod Impact, notched, 23°C	32	J/m	ASTM D 256
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	187	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	105	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.58E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.49	-	ASTM D 792
Mold Shrinkage, flow, 1.5-3.2 mm (5)	1.4 – 1.6	%	SABIC method
Mold Shrinkage, flow, 3.2-4.6 mm (5)	1.5 – 1.6	%	SABIC method
Mold Shrinkage, xflow, 1.5-3.2 mm (5)	1.3 – 1.4	%	SABIC method
Mold Shrinkage, xflow, 3.2-4.6 mm (5)	1.4 – 1.5	%	SABIC method
ELECTRICAL			
Dielectric Strength, in oil, 3.2 mm	16.9	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	3.1	-	ASTM D 150
Relative Permittivity, 1 MHz	2.9	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.0039	-	ASTM D 150
Dissipation Factor, 1 MHz	0.014	-	ASTM D 150
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	12	hrs	
Maximum Moisture Content	0.02	%	

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Melt Temperature	250 – 265	°C	
Nozzle Temperature	245 – 260	°C	
Front - Zone 3 Temperature	250 – 265	°C	
Middle - Zone 2 Temperature	245 – 260	°C	
Rear - Zone 1 Temperature	240 – 255	°C	
Mold Temperature	65 – 90	°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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