

Valox* Resin 365

Americas: COMMERCIAL

Unreinforced, opaque, provides chemical resistance and dimensional stability, UL94V-0 rated at 0.031".

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	41	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	41	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	120	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	68	MPa	ASTM D 790
Flexural Stress, brk, 1.3 mm/min, 50 mm span	68	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2240	MPa	ASTM D 790
Hardness, Rockwell R	115	-	ASTM D 785
IMPACT			
	Value	Unit	Standard
Izod Impact, notched, 23°C	640	J/m	ASTM D 256
Izod Impact, notched, -30°C	192	J/m	ASTM D 256
Izod Impact, notched, -40°C	170	J/m	ASTM D 256
Gardner, 23°C	37	J	ASTM D 3029
Modified Gardner, 23°C	37	J	ASTM D 3029
THERMAL			
	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	129	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	121	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.84E-05	1/°C	ASTM E 831
CTE, -40°C to 95°C, flow	7.92E-05	1/°C	ASTM E 831
CTE, 60°C to 138°C, flow	8.28E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	105	°C	UL 746B
Relative Temp Index, Mech w/impact	105	°C	UL 746B
Relative Temp Index, Mech w/o impact	105	°C	UL 746B
PHYSICAL			
	Value	Unit	Standard
Specific Gravity	1.33	-	ASTM D 792
Specific Volume	0.75	cm ³ /g	ASTM D 792
Water Absorption, 24 hours	0.14	%	ASTM D 570
Water Absorption, equilibrium, 23C	0.6	%	ASTM D 570
Mold Shrinkage, flow, 0.75-2.3 mm	0.8 - 1.1	%	SABIC Method
Mold Shrinkage, flow, 2.3-4.6 mm	1 - 1.4	%	SABIC Method
Mold Shrinkage, xflow, 0.75-2.3 mm	0.9 - 1.3	%	SABIC Method
Mold Shrinkage, xflow, 2.3-4.6 mm	1.2 - 1.6	%	SABIC Method
ELECTRICAL			
	Value	Unit	Standard
Dielectric Strength, in oil, 3.2 mm	12	kV/mm	ASTM D 149
Relative Permittivity, 100 Hz	8.5	-	ASTM D 150
Relative Permittivity, 1 MHz	5.7	-	ASTM D 150
Dissipation Factor, 100 Hz	0.002	-	ASTM D 150
Dissipation Factor, 1 MHz	0.03	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	6	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	2	PLC Code	UL 746A

High Voltage Arc Track Rate {PLC}	3	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	3	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-0 Flame Class Rating (3)	0.76	mm	UL 94
UL Recognized, 94-5VA Rating (3)	2.2	mm	UL 94
CSA (See File for complete listing)	LS88480	File No.	CSA LISTED
Oxygen Index (LOI)	28.8	%	ASTM D 2863
UV-light, water exposure/immersion	F2	-	UL 746C

Source GMD, last updated:01/03/2006

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	12	hrs
Maximum Moisture Content	0.02	%
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	50 - 75	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	50 - 100	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.025 - 0.038	mm

Source GMD, last updated:01/03/2006

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.

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