

VALOX* 730 Resin

Polybutylene Terephthalate

SABIC Innovative Plastics

Product Description			
35% glass/mineral reinforced. Low shrink. Better dimensional stability vs VALOX 420. Motorized heating appliances, etc.			
General			
Filler / Reinforcement	• Glass\Mineral, 35% Filler by Weight		
Features	• Good Dimensional Stability • Low Shrinkage		
Uses	• Appliance Components		
Forms	• Pellets		
Processing Method	• Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.55	g/cm³	ASTM D792
Molding Shrinkage			Internal Method
Flow ²	0.40 to 0.60	%	
Flow ³	0.30 to 0.40	%	
Across Flow ²	0.60 to 0.80	%	
Across Flow ³	0.40 to 0.60	%	
Water Absorption (24 hr)	0.080	%	ASTM D570
Specific Volume	0.650	cm³/g	ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ⁴ (Break)	65.5	MPa	ASTM D638
Flexural Modulus ⁵ (50.0 mm Span)	6210	MPa	ASTM D790
Flexural Strength ⁵ (Yield, 50.0 mm Span)	110	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	53.4	J/m	ASTM D256
Unnotched Izod Impact (23°C)	374	J/m	ASTM D4812
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	82		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 6.40 mm	210	°C	
1.8 MPa, Unannealed, 6.40 mm	171	°C	
CLTE - Flow			ASTM E831
-40 to 40°C	0.000031	cm/cm/°C	
60 to 138°C	0.000036	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.7E+15	ohm·cm	ASTM D257
Dielectric Strength			ASTM D149
1.60 mm, in Oil	32	kV/mm	
3.20 mm, in Air	20	kV/mm	
Dielectric Constant			ASTM D150
100 Hz	3.60		
1E+6 Hz	3.60		
Dissipation Factor			ASTM D150
100 Hz	0.0020		
1E+6 Hz	0.020		
Arc Resistance (PLC) ⁶	PLC 6		ASTM D495

VALOX* 730 Resin

Polybutylene Terephthalate

SABIC Innovative Plastics

Flammability	Nominal Value	Unit	Test Method
Flame Rating - UL (1.47 mm)	HB		UL 94
UL 746	Nominal Value	Unit	Test Method
RTI Str	140	°C	UL 746
RTI Imp	140	°C	UL 746
RTI Elec	140	°C	UL 746
Comparative Tracking Index (CTI) (PLC)	PLC 2		UL 746
High Voltage Arc Tracking Rate (HVTR) (PLC)			UL 746
--	PLC 1		
Hot-wire Ignition (HWI) (PLC)	PLC 0		UL 746
High Amp Arc Ignition (HAI) (PLC)	PLC 4		UL 746
Injection	Nominal Value	Unit	
Drying Temperature	121	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	12	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	40 to 80	%	
Rear Temperature	243 to 254	°C	
Middle Temperature	249 to 260	°C	
Front Temperature	254 to 266	°C	
Nozzle Temperature	254 to 271	°C	
Processing (Melt) Temp	254 to 277	°C	
Mold Temperature	65.6 to 93.3	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	50 to 80	rpm	
Vent Depth	0.025 to 0.038	mm	