SABIC Innovative Plastics™

Valox* Resin HR426

Americas: COMMERCIAL

AUTOMOTIVE. 30% GR, hydrolytically stable PBT. Excellent strength, stiffness and dimensional stability.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	117	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	3	%	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	6890	MPa	ASTM D 790
Hardness, Rockwell R	118	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	801	J/m	ASTM D 4812
Izod Impact, notched, 23°C	90	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	218	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	207	°C	ASTM D 648
Relative Temp Index, Elec	140	°C	UL 746B
Relative Temp Index, Mech w/impact	140	°C	UL 746B
Relative Temp Index, Mech w/o impact	140	°C	UL 746B
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.53	-	ASTM D 792
Specific Volume	0.65	cm³/g	ASTM D 792
Mold Shrinkage, flow, 1.5-3.2 mm	0.3 - 0.5	%	SABIC Method
Mold Shrinkage, flow, 3.2-4.6 mm	0.5 - 0.8	%	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 - 0.9	%	SABIC Method
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	1.9E+16	Ohm-cm	ASTM D 257
Dielectric Strength, in oil, 3.2 mm	19.1	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	3.24	-	ASTM D 150
Relative Permittivity, 1 MHz	3.13	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.003	-	ASTM D 150
Dissipation Factor, 1 MHz	0.014	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
Hot Wire Ignition {PLC)	0	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	3	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	1	PLC Code	UL 746A
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	0.76	mm	UL 94
HYDROLYTIC STABILITY	Value	Unit	Standard
50% Loss of TS at 120°C/100% RH	0	days	SABIC Method
50% Loss of TS at 85°C/94% RH	200	Days (>)	SABIC Method

Source GMD, last updated:12/29/1999

Processing

Parameter Injection Molding	Value	Unit
Drying Temperature	60 - 75	°C
Drying Time	4 - 5	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.05	%
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

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.