SABIC Innovative Plastics™

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Xenoy* Resin 6370

Americas: COMMERCIAL

30% glass-reinforced, impact modified thermoplastic alloy. Improved toughness and ductility.

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	91	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4	%	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	137	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5370	MPa	ASTM D 790
Hardness, Rockwell R	109	-	ASTM D 785
IMPACT			
Izod Impact, unnotched, 23°C	640	J/m	ASTM D 4812
Izod Impact, notched, 23°C	170	J/m	ASTM D 256
Izod Impact, notched, -30°C	112	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	4	J	ASTM D 3763
Instrumented Impact Total Energy, 23°C	16	J	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	204	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	148	°C	ASTM D 648
CTE, -40°C to 40°C, flow	2.7E-05	1/°C	ASTM E 831
CTE, 60°C to 138°C, flow	1.98E-05	1/°C	ASTM E 831
Relative Temp Index, Elec	140	°C	UL 746B
Relative Temp Index, Mech w/impact	130	°C	UL 746B
Relative Temp Index, Mech w/o impact	140	°C	UL 746B
PHYSICAL			
Specific Gravity	1.44	-	ASTM D 792
Specific Volume	0.69	cm^3/g	ASTM D 792
Water Absorption, 24 hours	0.09	%	ASTM D 570
Mold Shrinkage, flow, 0.75-2.3 mm	0.3 - 0.4	%	SABIC Method

1) Typical values only. Variations within normal tolerances are possible for variose colours.All values are measured at least after 48 hours storage at 230C/50% relative humidity.
All properties, expect the melt volume rate are measured on injection moulded samples.
All samples are prepared according to ISO 294.

2) Only typical data for material selection purpose.Not to be used for part or tool design.
3) This rating is not intended to reflect hazards presented this or any other material under actual fire conditions.
4) Own measurement according to UL.

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TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
PHYSICAL			
Mold Shrinkage, flow, 2.3-4.6 mm	0.4 - 0.5	%	SABIC Method
Mold Shrinkage, xflow, 0.75-2.3 mm	0.4 - 0.7	%	SABIC Method
Mold Shrinkage, xflow, 2.3-4.6 mm	0.7 - 0.9	%	SABIC Method
ELECTRICAL			
Volume Resistivity	4.8E+15	Ohm-cm	ASTM D 257
Dielectric Strength, in air, 3.2 mm	20.8	kV/mm	ASTM D 149
Dielectric Strength, in oil, 1.6 mm	27.5	kV/mm	ASTM D 149
Relative Permittivity, 100 Hz	4	-	ASTM D 150
Relative Permittivity, 1 MHz	3.9	-	ASTM D 150
Dissipation Factor, 100 Hz	0.003	-	ASTM D 150
Dissipation Factor, 1 MHz	0.02	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495
Hot Wire Ignition {PLC)	1	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	1	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	3	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.49	mm	UL 94

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Source, GMD, Last Update:04/14/2003

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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
Injection Molding		
Drying Temperature	110	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	260 - 280	°C
Nozzle Temperature	255 - 275	°C
Front - Zone 3 Temperature	260 - 280	°C
Middle - Zone 2 Temperature	255 - 275	°C
Rear - Zone 1 Temperature	250 - 270	°C
Mold Temperature	65 - 95	°C
Back Pressure	0.3 - 0.6	MPa
Screw Speed	50 - 80	rpm
Shot to Cylinder Size	50 - 80	%
Vent Depth	0.013 - 0.02	mm

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