SABIC Innovative Plastics™

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Xenoy* Resin 5770

Americas: COMMERCIAL

20% GR/MR, PC/polyester alloy. Impact modified, chemical resistance, good surface and low warpage. Lawn and garden applications.

TYPICAL PROPERTIES [1]	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	82	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	84	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4.5	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	131	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	4960	MPa	ASTM D 790
Hardness, Rockwell R	95	-	ASTM D 785
IMPACT			
Izod Impact, unnotched, 23°C	640	J/m	ASTM D 4812
Izod Impact, notched, 23°C	106	J/m	ASTM D 256
Izod Impact, notched, -30°C	69	J/m	ASTM D 256
Gardner, 23°C	67	J	ASTM D 3029
Gardner, -30°C	33	J	ASTM D 3029
Instrumented Impact Energy @ peak, 23°C	13	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	146	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	143	°C	ASTM D 648
Relative Temp Index, Elec	75	°C	UL 746B
Relative Temp Index, Mech w/impact	75	°C	UL 746B
Relative Temp Index, Mech w/o impact	75	°C	UL 746B
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.7 - 0.9	%	SABIC Method
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.52	mm	UL 94

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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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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