

DATA ON BK1005 ONLY.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	96	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	96	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	4.1	%	ASTM D 638
Tensile Modulus, 5 mm/min	7580	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	135	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6890	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	86	MPa	ISO 527
Tensile Stress, break, 5 mm/min	86	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	145	MPa	ISO 178
Flexural Stress, break, 2 mm/min	145	MPa	ISO 178
Flexural Modulus, 2 mm/min	7150	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	267	J/m	ASTM D 4812
Izod Impact, notched, 23°C	42	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	9	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	180	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	177	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	171	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	181	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	173	°C	ASTM D 648
CTE, -30°C to 30°C, flow	6.12E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.58E-04	1/°C	ASTM D 696
CTE, 23°C to 150°C, flow	1.3E-05	1/°C	ISO 11359-2
CTE, 23°C to 150°C, xflow	5.7E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	180	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	177	°C	ISO 75/Af
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL			
Specific Gravity	1.18	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.1 - 0.3	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Melt Flow Rate, 300°C/5.0 kgf	7.6	g/10 min	ASTM D 1238
ELECTRICAL			
Surface Resistivity	1.E+04	Ohm	ASTM D 257

FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-1 Flame Class Rating (3)	1.49	mm	UL 94

Source GMD, last updated:12/14/2001

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	110 - 120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	300 - 325	°C
Nozzle Temperature	300 - 325	°C
Front - Zone 3 Temperature	290 - 325	°C
Middle - Zone 2 Temperature	275 - 320	°C
Rear - Zone 1 Temperature	265 - 315	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	20 - 100	rpm
Shot to Cylinder Size	30 - 70	%

Source GMD, last updated:12/14/2001

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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