

## Xenoy® Resin 1403B

### Americas: COMMERCIAL

AUTOMOTIVE. Unreinforced, impact modified PBT+PC alloy. Excellent low temperature impact and chemical resistance. Blow Molding grade

TYPICAL PROPERTIES <sup>1</sup>	TYPICAL VALUE	UNIT	STANDARD
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	49	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	47	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	90	%	ASTM D 638
Tensile Modulus, 50 mm/min	1930	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	68	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1860	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	694	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	54	J	ASTM D 3763
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	125	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	101	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	87	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.57E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.76E-04	1/°C	ASTM E 831
<b>PHYSICAL</b>			
Specific Gravity	1.19	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.6 - 0.8	%	SABIC Method
Melt Flow Rate, 266°C/5.0 kgf	7	g/10 min	ASTM D 1238

1) Typical values only. Variations within normal tolerances are possible for various colours. All values are measured at least after 48 hours storage at 230C/50% relative humidity.  
All properties, except 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 by this or any other material under actual fire conditions.  
4) Own measurement according to UL.



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PROCESSING PARAMETERS	TYPICAL VALUE	UNIT
<b>Extrusion Blow Molding</b>		
Drying Temperature	95 - 100	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	24	hrs
Maximum Moisture Content	0.01 - 0.02	%
Minimum Moisture Content	0.02	%
Melt Temperature (Parison)	240 - 250	°C
Barrel - Zone 1 Temperature	235 - 245	°C
Barrel - Zone 2 Temperature	235 - 245	°C
Barrel - Zone 3 Temperature	235 - 245	°C
Barrel - Zone 4 Temperature	235 - 245	°C
Adapter - Zone 5 Temperature	235 - 245	°C
Head - Zone 6 - Top Temperature	235 - 245	°C
Head - Zone 7 - Bottom Temperature	235 - 245	°C
Mold Temperature	65 - 90	°C
Die Temperature	240 - 250	°C

- Purge with HDPE prior to changing screw, head, or die tooling and/or machine shutdown.
- Use moderate-slow screw speeds to keep melt temperature in suggested range. Suggested screw speed: 15 - 50 rpm. Actual rpm should be adjusted for desired output.
- Processing temperature must be measured with a hand-held probe as opposed to an internal-head probe.
- A reverse barrel profile may increase output while maintaining the melt temperature.

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