

Technical Data Sheet

# Diamond Abs 7600B 1002 FDA

Acrylonitrile Butadiene Styrene  
 LyondellBasell Industries  
 Engineering Plastics

General	
Features	• Ultra High Impact Resistance
Agency Ratings	• FDA 21 CFR 176.170(c), Table 1 • FDA 21 CFR 176.170(c), Table 2
UL File Number	• E119088
Processing Method	• Blow Molding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Mass-Flow Rate (MFR) <sup>1</sup>			ASTM D1238
200°c/5.0 Kg	0.60 g/10 min	0.60 g/10 min	
230°c/3.8 Kg	2.7 g/10 min	2.7 g/10 min	

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	5730 psi	39.5 MPa	ASTM D638
Flexural Modulus - Tangent <sup>3</sup>	292000 psi	2010 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°f (23°c), 0.125 In (3.18 Mm)	8.1 ft·lb/in	430 J/m	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	102	102	ASTM D785

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 Psi (1.8 Mpa), Unannealed, 0.125 In (3.18 Mm)	171 °F	77.2 °C	
264 Psi (1.8 Mpa), Annealed, 0.125 In (3.18 Mm)	201 °F	93.9 °C	
Vicat Softening Temperature	220 °F	104 °C	ASTM D1525 <sup>4</sup>

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.5 Mm))	HB	HB	UL 94

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 185 °F	80 to 85 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Rear Temperature	374 to 482 °F	190 to 250 °C
Middle Temperature	374 to 482 °F	190 to 250 °C
Front Temperature	374 to 482 °F	190 to 250 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Rate	Moderate-Fast	Moderate-Fast

**Notes**

- <sup>1</sup> Procedure A
- <sup>2</sup> 2.0 in/min (51 mm/min)
- <sup>3</sup> 0.050 in/min (1.3 mm/min)
- <sup>4</sup> Loading 1 (10 N)

**Notes**

These are typical property values not to be construed as specification limits.