

Technical Data Sheet

Diamond Abs 1000

Acrylonitrile Butadiene Styrene
 LyondellBasell Industries
 Engineering Plastics

General		
Features	<ul style="list-style-type: none"> High Gloss 	
Agency Ratings	<ul style="list-style-type: none"> EC 1907/2006 (REACH) 	<ul style="list-style-type: none"> EU 2002/96/EC (WEEE)
RoHS Compliance	<ul style="list-style-type: none"> RoHS Compliant 	
UL File NumberUsa	<ul style="list-style-type: none"> E150937 	
Appearance	<ul style="list-style-type: none"> Colors Available 	
Forms	<ul style="list-style-type: none"> Pellets 	
Processing Method	<ul style="list-style-type: none"> Injection Molding 	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.06	1.06 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (200°c/5.0 Kg)	3.5 g/10 min	3.5 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹ (Yield)	7500 psi	51.7 MPa	ASTM D638
Flexural Modulus - Tangent ²	368000 psi	2540 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)	1.5 ft·lb/in	80 J/m	

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	115	115	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)	172 °F	78.0 °C	
264 Psi (1.8 Mpa), Annealed, 0.125 In (3.18 Mm)	199 °F	92.8 °C	
Vicat Softening Temperature	219 °F	104 °C	ASTM D1525

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 In (1.6 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 Pressure	7000 to 11000 psi	48.3 to 75.8 MPa

Notes

- ¹ 2.0 in/min (51 mm/min)
- ² 0.050 in/min (1.3 mm/min)

Notes

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