

Technical Data Sheet

Diamond Abs 3500 LG

Acrylonitrile Butadiene Styrene
 LyondellBasell Industries
 Engineering Plastics

General			
Features	• Low Gloss	• Medium Flow	• Medium Impact Resistance
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.04	1.04 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) ¹			ASTM D1238
200°c/5.0 Kg	2.3 g/10 min	2.3 g/10 min	
230°c/3.8 Kg	6.0 g/10 min	6.0 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	6000 psi	41.4 MPa	ASTM D638
Flexural Modulus - Tangent ³	300000 psi	2070 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)	4.6 ft·lb/in	250 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	104	104	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), Injection Molded	170 °F	76.7 °C	
Vicat Softening Temperature	220 °F	104 °C	ASTM D1525 ⁴

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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	392 to 428 °F	200 to 220 °C
Middle Temperature	392 to 428 °F	200 to 220 °C
Front Temperature	392 to 428 °F	200 to 220 °C
Mold Temperature	104 to 140 °F	40 to 60 °C
Injection Rate	Slow-Moderate	Slow-Moderate

Notes

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

Notes

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