

Technical Data Sheet

Diamond Abs 3500 HF

Acrylonitrile Butadiene Styrene
 LyondellBasell Industries
 Engineering Plastics

General		
Features	<ul style="list-style-type: none"> High Flow 	<ul style="list-style-type: none"> Medium Impact Resistance
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 	
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) ¹			ASTM D1238
200°C/5.0 Kg	3.0 g/10 min	3.0 g/10 min	
230°C/3.8 Kg	11 g/10 min	11 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ² (Yield)	7200 psi	49.6 MPa	ASTM D638
Flexural Modulus - Tangent ³	360000 psi	2480 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)	4.0 ft-lb/in	210 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)	175 °F	79.4 °C	
264 Psi (1.8 Mpa), Annealed, 0.125 In (3.18 Mm)	205 °F	96.1 °C	
Vicat Softening Temperature	218 °F	103 °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	356 to 464 °F	180 to 240 °C
Middle Temperature	356 to 464 °F	180 to 240 °C
Front Temperature	356 to 464 °F	180 to 240 °C
Mold Temperature	104 to 176 °F	40 to 80 °C
Injection Rate	Moderate-Fast	Moderate-Fast

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.