

Technical Data Sheet

# Diamond Abs ABS 3501 HF

Acrylonitrile Butadiene Styrene  
LyondellBasell Industries  
Engineering Plastics

General			
Features	• Good Flow		
Forms	• Pellets		
Processing Method	• Injection Molding		
Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05	1.05 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) <sup>1</sup>			ASTM D1238
200°c/5.0 Kg	2.0 g/10 min	2.0 g/10 min	
230°c/3.8 Kg	7.0 g/10 min	7.0 g/10 min	
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength <sup>2</sup> (Yield)	6000 psi	41.4 MPa	ASTM D638
Flexural Modulus - Tangent <sup>3</sup>	328000 psi	2260 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)	5.0 ft-lb/in	270 J/m	
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness (R-scale)	103	103	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	
Vicat Softening Temperature	219 °F	104 °C	ASTM D1525 <sup>4</sup>

Technical Data Sheet

# Diamond Abs ABS 3501 HF

Acrylonitrile Butadiene Styrene  
 LyondellBasell Industries  
 Engineering Plastics



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.