

**Technical Data Sheet**

***Diamond* ABS 3500LG BR831 UVBWN**



Acrylonitrile Butadiene Styrene

**Product Description**

*Diamond* ABS 3500LG BR831 UVBWN is a Acrylonitrile Butadiene Styrene material and is typically used in Injection Molding applications. Features include: Low Gloss, Medium Flow, and Medium Impact Resistance.

**Processing Method**            Injection Molding

**Attribute**                      Low Gloss; Medium Flow; Medium Impact Resistance

<b>Typical Properties</b>	<b>Nominal Value</b>	<b>Units</b>	<b>Test Method</b>
<b>Physical</b>			
Melt Flow Rate			
(200 °C/5.0 kg, Procedure A)	2.3	g/10 min	ASTM D1238
(230 °C/3.8 kg, Procedure A)	6.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.04	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical</b>			
Tensile Strength at Yield, (51 mm/min)	41.4	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2070	MPa	ASTM D790
<b>Impact</b>			
Notched Izod Impact, (23 °C, 3.18 mm)	250	J/m	ASTM D256
<b>Hardness</b>			
Rockwell Hardness, (R-Scale)	104		ASTM D785
<b>Thermal</b>			
Vicat Softening Temperature, (Loading 1 (10 N))	104	°C	ASTM D1525
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm, Injection Molded)	76.7	°C	ASTM D648

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
Drying Time	2.0 to 4.0	hr
Drying Temperature	80 to 85	°C
Suggested Max Moisture	0.1	%
Front Temperature	200 to 220	°C
Middle Temperature	200 to 220	°C
Rear Temperature	200 to 220	°C
Injection Rate	Slow-Moderate	
Mold Temperature	40 to 60	°C