

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

Typical Properties	Nominal Value	Units	Test Method
Physical			
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 ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	41.4	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2070	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	250	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	104		ASTM D785
Thermal			
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

Injection Parameters	Nominal Value	Units
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