Technical Data Sheet

Diamond ABS 6501.1002 Nat

Acrylonitrile Butadiene Styrene

Product Description

Diamond ABS 6501.1002 Nat is a Acrylonitrile Butadiene Styrene material and is typically used in Injection Molding applications. Features include: Ultra High Impact Resistance.

Processing Method	Injection Molding
Attribute	Ultra High Impact Resistance
Forms	Pellets

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(200 °C/5.0 kg, Procedure A)	0.50	g/10 min	ASTM D1238
(230 °C/3.8 kg, Procedure A)	1.7	g/10 min	ASTM D1238
Density - Specific Gravity	1.03	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	38.6	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	1880	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	400	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	101		ASTM D785
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	106	°C	ASTM D1525
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	82.2	°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	190 to 250	°C
Middle Temperature	190 to 250	°C
Rear Temperature	190 to 250	°C
Injection Rate	Moderate-Fast	
Mold Temperature	40 to 80	°C