Technical Data Sheet

Diamond ABS 3501 90207WHI

Acrylonitrile Butadiene Styrene

Product Description

Diamond ABS 3501 90207WHI is a Acrylonitrile Butadiene Styrene material and is typically used in Injection Molding applications. Features include: High Impact Resistance.

Processing Method	Injection Molding
Attribute	High Impact Resistance
Forms	Pellets

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate			
(200 °C/5.0 kg, Procedure A)	2.0	g/10 min	ASTM D1238
(230 °C/3.8 kg, Procedure A)	5.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.05	g/cm³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	44.8	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2260	MPa	ASTM D790
Impact			
Notched Izod Impact, (23 °C, 3.18 mm)	300	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	106		ASTM D785
Thermal			
Vicat Softening Temperature, (Loading 1 (10 N))	104	°C	ASTM D1525
Deflection Temperature Under Load Annealed (264 psi), (3.18 mm)	93.9	°C	ASTM D648
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	77.2	°C	ASTM D648
UL Information			
Flame Rating, (1.5 mm)	HB		UL 94
UL File Number	E51193		

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