

Technical Data Sheet

Diamond ABS TR5000 BLACK 7449



Acrylonitrile Butadiene Styrene

Product Description

Diamond ABS TR5000 BLACK 7449 is a Acrylonitrile Butadiene Styrene material and is typically used in Injection Molding applications.

Processing Method	Injection Molding
Forms	Pellets
Appearance	Clear/Transparent

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (200 °C/5.0 kg, Procedure A)	2.1	g/10 min	ASTM D1238
Density - Specific Gravity	1.1	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield, (51 mm/min)	48.8	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Procedure B, Method I (3 point load))	2300	MPa	ASTM D790
Impact			
Notched Izod Impact, (3.18 mm, Method A)	110	J/m	ASTM D256
Hardness			
Rockwell Hardness, (R-Scale)	112		ASTM D785
Thermal			
Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm)	72.8	°C	ASTM D648
Optical			
Haze, (3000 µm)	3.50	%	ASTM D1003
Light Transmittance, (3000 µm)	90.0	%	ASTM D1003
UL Information			
Flame Rating	HB		UL 94
UL File Number, (USA)	E150937		

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