

Technical Data Sheet

Diamond QR-2005IM(D)-BK

Acrylonitrile Butadiene Styrene

Product Description

Available with either high or low gloss.

Processing Method	Injection Molding
Attribute	High Impact Resistance
Forms	Pellets
Appearance	Colors Available

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/3.8 kg)	5.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.04	g/cm ³	ASTM D792
Mechanical			
Tensile Strength at Yield	44.1	MPa	ASTM D638
Flexural Strength at Yield	72.4	MPa	ASTM D790
Flexural Modulus	2340	MPa	ASTM D790
Impact			
Notched Izod Impact			
(23 °C)	370	J/m	ASTM D256
(-40 °C)	64	J/m	ASTM D256
Thermal			
Deflection Temperature Under Load Unannealed (264 psi)	85	°C	ASTM D648
Deflection Temperature Under Load Unannealed (66 psi)	93.3	°C	ASTM D648

Injection Parameters	Nominal Value	Units
Drying Time	2.0 to 4.0	hr
Drying Temperature	93	°C
Nozzle Temperature	216 to 260	°C
Processing (Melt) Temp	216 to 260	°C
Front Temperature	216 to 238	°C
Middle Temperature	204 to 227	°C
Rear Temperature	188 to 210	°C
Mold Temperature	49 to 71	°C
Drying Time, Maximum	4	hr