

Technical Data Sheet



QR Resin QR-0102

Acrylonitrile Styrene Acrylate
Engineering Plastics

General			
Features	• Good Impact Resistance • Good Toughness	• UV Resistant • Weather Resistant	
Appearance	• Black	• Colors Available	
Forms	• Pellets		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.05 to 1.07	1.05 to 1.07 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in (3.18 mm))	5.0E-3 to 7.0E-3 in/in	0.50 to 0.70 %	ASTM D955

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield)	6000 psi	41.4 MPa	ASTM D638
Flexural Modulus	300000 psi	2070 MPa	ASTM D790
Flexural Strength (Yield)	9000 psi	62.1 MPa	ASTM D790

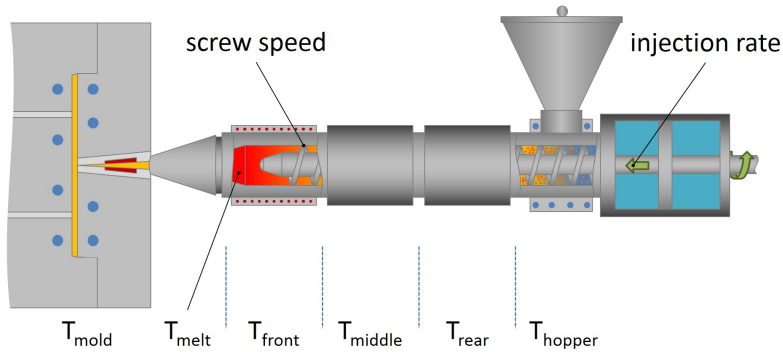
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	4.0 ft·lb/in	210 J/m	ASTM D256

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	200 °F	93.3 °C	
264 psi (1.8 MPa), Unannealed	180 °F	82.2 °C	

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Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	175 °F	79 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Drying Time, Maximum	4.0 hr	4.0 hr
Rear Temperature	450 to 520 °F	232 to 271 °C
Middle Temperature	450 to 520 °F	232 to 271 °C
Front Temperature	450 to 520 °F	232 to 271 °C
Nozzle Temperature	460 to 540 °F	238 to 282 °C
Processing (Melt) Temp	460 to 550 °F	238 to 288 °C
Mold Temperature	110 to 160 °F	43 to 71 °C

Notes

These are typical property values not to be construed as specification limits.