Technical Data Sheet

QR Resin QR-4000

Polyphenylene Ether + PS + PA
Engineering Plastics

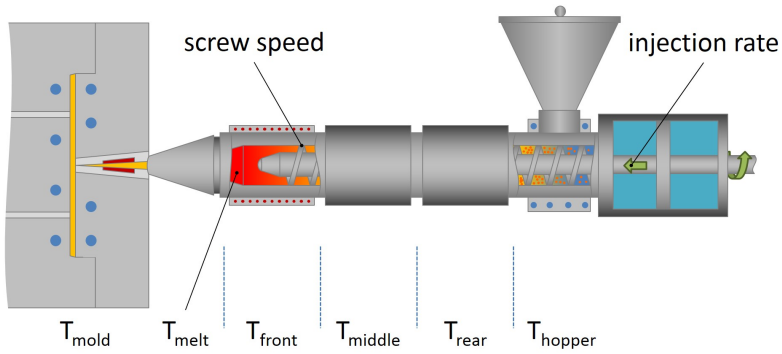
General		
Features	• Chemical Resistant	• Paintable
Automotive Specifications	• CHRYSLER MS-DB-414 CPN3387 Color: GY Black	
Appearance	• Black	• Grey
Forms	• Pellets	
Processing Method	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density / Specific Gravity	1.08	1.08 g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (280°C/2.16 kg)	4.0 g/10 min	4.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.125 in (3.18 mm))	0.010 in/in	1.0 %	ASTM D955
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Strength (Yield)	8000 psi	55.2 MPa	ASTM D638
Flexural Modulus	300000 psi	2070 MPa	ASTM D790
Flexural Strength (Yield)	12500 psi	86.2 MPa	ASTM D790
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Notched Izod Impact (73°F (23°C))	3.5 ft·lb/in	190 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	290 °F	143 °C	
264 psi (1.8 MPa), Unannealed	255 °F	124 °C	

Technical Data Sheet

QR Resin QR-4000

Polyphenylene Ether + PS + PA
Engineering Plastics



Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	200 to 225 °F	93 to 107 °C
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr
Drying Time, Maximum	6.0 hr	6.0 hr
Suggested Max Moisture	0.02 %	0.02 %
Rear Temperature	480 to 530 °F	249 to 277 °C
Middle Temperature	490 to 540 °F	254 to 282 °C
Front Temperature	500 to 550 °F	260 to 288 °C
Nozzle Temperature	520 to 560 °F	271 to 293 °C
Processing (Melt) Temp	510 to 550 °F	266 to 288 °C
Mold Temperature	150 to 200 °F	66 to 93 °C

Notes

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