

# Ryton® QC220N

## polyphenylene sulfide

Ryton® PPS Fiber Grade Resins are high molecular weight polyphenylene sulfide polymers suitable for monofilament and/or multifilament fiber extrusion.

They exhibit excellent thermal stability and chemical resistance.

### General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • Latin America • North America
Features	• Chemical Resistant • Good Thermal Stability • High Molecular Weight
Uses	• Fibers
RoHS Compliance	• RoHS Compliant
Forms	• Powder
Processing Method	• Filament Extrusion

### Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.35		ASTM D792
Melt Mass-Flow Rate (MFR) <sup>1</sup> (316°C/5.0 kg)	170	g/10 min	ASTM D1238
Water Absorption (Equilibrium)	0.050	%	ASTM D570
Ash Content	0.30	wt%	ISO 3451-1
Volatiles (150°C)	< 0.30	wt%	

### Mechanical

	Typical Value	Unit	Test method
Tensile Strength	85.0	MPa	ASTM D638
Tensile Elongation (Break)	10	%	ASTM D638

### Thermal

	Typical Value	Unit	Test method
Deflection Temperature Under Load 1.8 MPa, Unannealed	105	°C	ASTM D648
Melting Temperature	285	°C	ISO 11357-3
CLTE - Flow (-50 to 50°C)	5.0E-5	cm/cm/°C	ASTM E831

### Electrical

	Typical Value	Unit	Test method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Dielectric Strength	24	kV/mm	ASTM D149
Dielectric Constant (25°C, 1 MHz)	3.20		ASTM D150
Dissipation Factor (25°C, 1 MHz)	2.0E-3		ASTM D150

### Optical

	Typical Value	Unit
Color L - Hunter	90.00	

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Additional Information	Typical Value	Unit
Weight Loss on Heating (300°C)	< 0.50	wt%

Notes

Typical properties: these are not to be construed as specifications.

<sup>1</sup> Procedure B

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