

Ryton® QC220P

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	• Pellets
Processing Method	• Filament Extrusion

Physical

	Typical Value	Unit	Test method
Density / Specific Gravity	1.35		ASTM D792
Melt Mass-Flow Rate (MFR) ¹ (316°C/5.0 kg)	170	g/10 min	ASTM D1238
Water Absorption (Equilibrium)	0.050	%	ASTM D570
Ash Content	0.3	wt%	ISO 3451-1
Volatiles (150°C)	< 0.3	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	

Additional Information

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

Ryton[®] QC220P

polyphenylene sulfide

Notes

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

¹ Procedure B



Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

Neither Solvay Specialty Polymers nor any of its affiliates makes any warranty, express or implied, including merchantability or fitness for use, or accepts any liability in connection with this product, related information or its use. Some applications of which Solvay's products may be proposed to be used are regulated or restricted by applicable laws and regulations or by national or international standards and in some cases by Solvay's recommendation, including applications of food/feed, water treatment, medical, pharmaceuticals, and personal care. Only products designated as part of the Solviva[®] family of biomaterials may be considered as candidates for use in implantable medical devices. The user alone must finally determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The information and the products are for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right.

All trademarks and registered trademarks are property of the companies that comprise the Solvay Group or their respective owners.

© 2019 Solvay Specialty Polymers. All rights reserved.