

FORTRON[®] CES51

Polyphenylene sulfide

Fortron CES51 is a 20% glass reinforced PPS resin with low chlorine content. It offers excellent physical properties and good adhesion to metal with nano molding technology treatment.

Product information Resin Identification Part Marking Code	PPS-GF20 >PPS-GF20<		ISO 1043 ISO 11469
Rheological properties			
Moulding shrinkage, parallel Moulding shrinkage, normal	0.2 0.4		ISO 294-4, 2577 ISO 294-4, 2577
Typical mechanical properties			
Tensile modulus	7200	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min		MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.5		ISO 527-1/-2
Flexural modulus Flexural strength	7000	мРа МРа	ISO 178 ISO 178
Charpy impact strength, 23°C		kJ/m ²	ISO 178 ISO 179/1eU
Charpy notched impact strength, 23°C		kJ/m ²	ISO 179/1eA
Poisson's ratio	0.35 ^[C]		
[C]: Calculated			
Thermal properties			
Temperature of deflection under load, 1.8 MPa	240	°C	ISO 75-1/-2
Physical/Other properties			
Density	1420	kg/m³	ISO 1183
Injection			
Drying Recommended	yes		
Drying Temperature	130	°C	
Drying Time, Dehumidified Dryer	2 - 4		
Processing Moisture Content	≤0.02		
Melt Temperature Optimum Min. melt temperature	330 310	-	
Max. melt temperature	340		
Screw tangential speed	0.2 - 0.3	-	
Mold Temperature Optimum	150		
Min. mould temperature	140		
Max. mould temperature	160 30 - 70		
Hold pressure range Back pressure		MPa MPa	
Buon probluio	5	in u	

(+) **18816996168** Ponciplastics.com



FORTRON[®] CES51

Polyphenylene sulfide

Characteristics

Processing Special characteristics

Injection Moulding Flame retardant

Printed: 2025-05-30

Revised: 2024-06-13 Source: Celanese Materials Database

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication as a promise or guarantee of specific properties of our groucts. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any equipment, processing technique or material mentioned in this publication should satisfy themselves that they can meet all applicable safety and health standards. We strongly recommend that users seek and adhere to the

© 2025 Celanese or its affiliates. All rights reserved. Celanese®, registered C-ball design and all other trademarks identified herein with ®, TM, SM, unless otherwise noted, are trademarks of Celanese or its affiliates. Fortron is a registered trademark of Fortron Industries LLC.

Page: 2 of 2