

FORTRON® 1115L0

Polyphenylene sulfide

Fortron® 1115L0 is a 15% fiberglass-reinforced grade of polyphenylene sulfide with high melt strength suitable for blow molding and extrusion applications.

The recommended processing conditions are similar to those of our standard grades, except drying conditions are somewhat milder at 80 to 100 °C for 3-4 hours.

Product information

Resin Identification	PPS-GF15	ISO 1043
Part Marking Code	>PPS-GF15<	ISO 11469

Typical mechanical properties

Tensile modulus	7700 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	120 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2 %	ISO 527-1/-2
Flexural modulus	7500 MPa	ISO 178
Flexural strength	200 MPa	ISO 178
Charpy impact strength, 23°C	32 kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	5 kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	5.2 kJ/m²	ISO 180/1A
Ball indentation hardness, H 961/30	227 MPa	ISO 2039-1
Poisson's ratio	0.38	

Thermal properties

Temperature of deflection under load, 1.8 MPa	220 °C	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	115 °C	ISO 75-1/-2

Flammability

Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	0.75 mm	IEC 60695-11-10

Electrical properties

Surface resistivity	>1E15 Ohm	IEC 62631-3-2
---------------------	-----------	---------------

Physical/Other properties

Water absorption, 2mm	0.02 %	Sim. to ISO 62
Density	1440 kg/m³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.02 %
Melt Temperature Optimum	330 °C
Min. melt temperature	310 °C
Max. melt temperature	340 °C
Screw tangential speed	0.2 - 0.3 m/s
Mold Temperature Optimum	150 °C

FORTRON® 1115L0

Polyphenylene sulfide

Min. mould temperature	140 °C
Max. mould temperature	160 °C
Hold pressure range	30 - 70 MPa
Back pressure	3 MPa

Characteristics

Processing	Injection Moulding, Extrusion, Blow Moulding
Special characteristics	Flame retardant

Additional information

Processing Notes

Pre-Drying

FORTRON should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be $\leq -30^{\circ}\text{C}$. The time between drying and processing should be as short as possible.

Storage

For subsequent storage the material should be stored dry in the dryer until processed ($\leq 60\text{ h}$).

Processing Notes

The higher drying conditions result in higher melt viscosity

Automotive

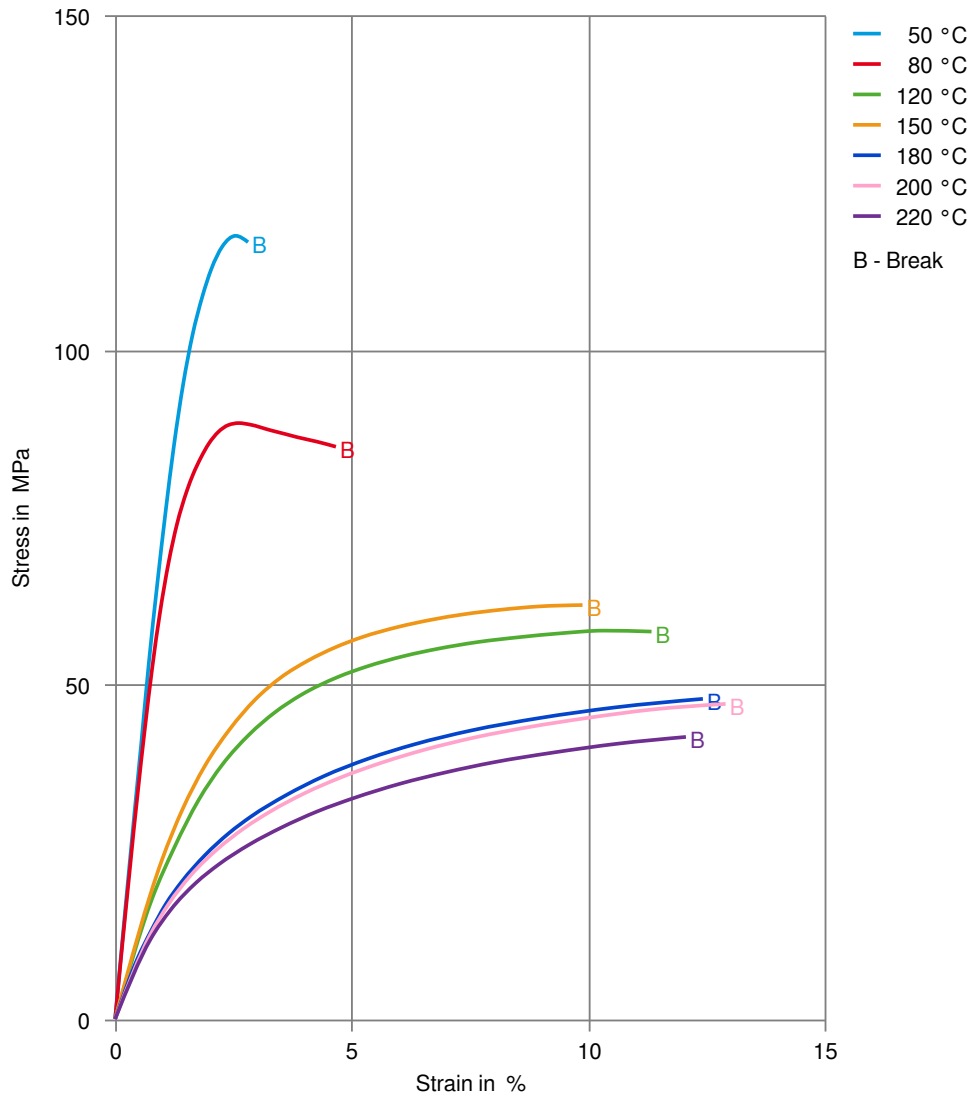
OEM
General Motors

ADDITIONAL INFORMATION
Black; Special Parts Approval, See Your CE
Account Representative for Further Details.

FORTRON® 1115L0

Polyphenylene sulfide

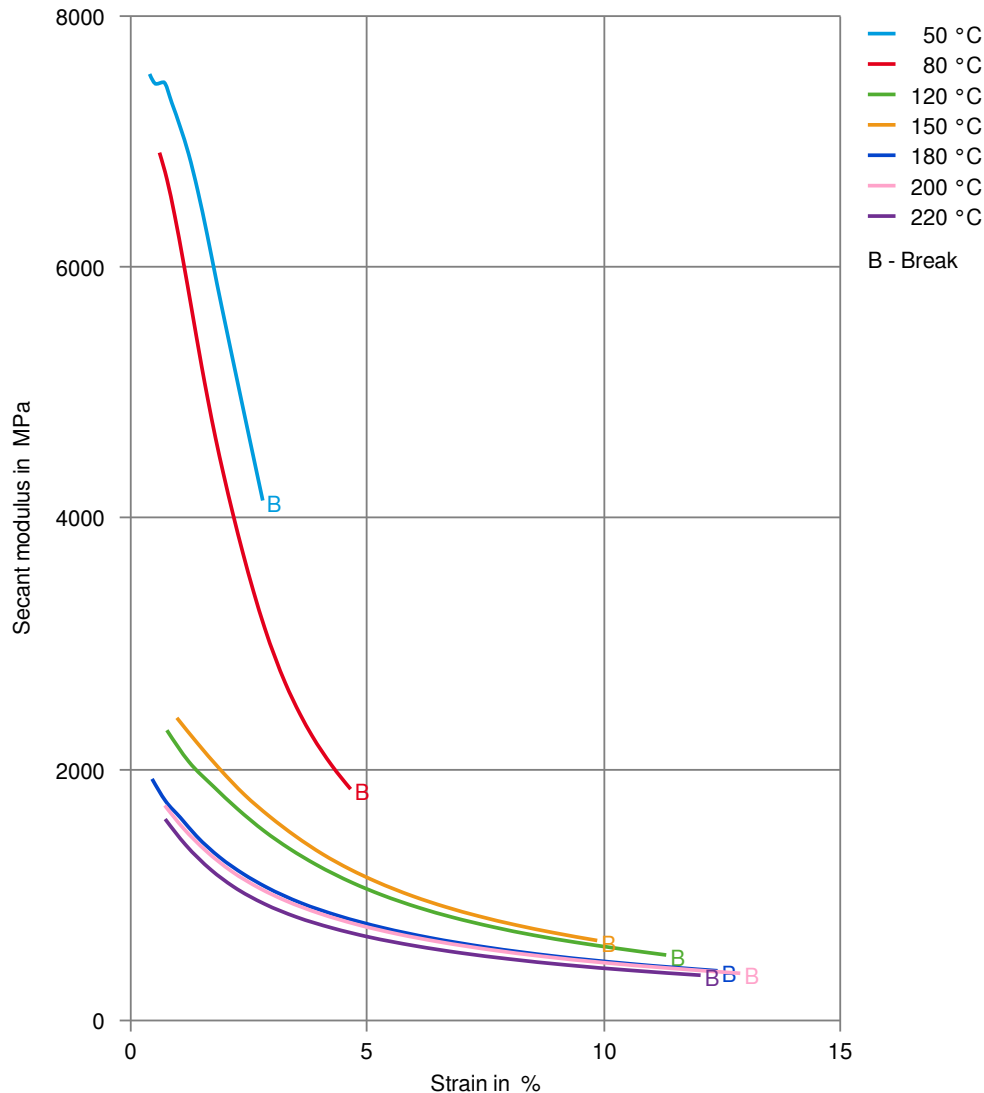
Stress-strain



FORTRON® 1115L0

Polyphenylene sulfide

Secant modulus-strain



Printed: 2025-03-24

Page: 4 of 4

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, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are 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 should not be construed as a promise or guarantee of specific properties of our products. 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 manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

© 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. KEPITAL is a registered trademark of Korea Engineering Plastics Company, Ltd.