(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

40% Long glass fiber reinforced, heat stabilized, Nylon 6/6

Product information

Resin Identification	PA66-LGF40	ISO 1043
Part Marking Code	>PA66-LGF40<	ISO 11469

Typical mechanical properties

	dry/cond.		
Tensile modulus	13700 / 11100	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	200 / 159	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 / 2	%	ISO 527-1/-2
Flexural modulus	12000 / 9200	MPa	ISO 178
Flexural strength	310 / 240	MPa	ISO 178
Charpy impact strength, 23 °C	55 / 67	kJ/m²	ISO 179/1eU
Charpy impact strength, -30 °C	52 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23 °C	25 / 21	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30 °C	28 / -	kJ/m²	ISO 179/1eA
Poisson's ratio	0.33 / -[C]		

[C]: Calculated

Thermal properties

	dry/cond.		
Temperature of deflection under load, 1.8 MPa	259 / *	°C	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	240 / *	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	14 / *	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	83 / *	E-6/K	ISO 11359-1/-2

Physical/Other properties

	dry/cond.		
Density	1460 / -	kg/m³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	80	°C
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.2	%
Melt Temperature Optimum	295	°C
Min. melt temperature	285	°C
Max. melt temperature	305	°C
Screw tangential speed	≤0.2	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	70	°C
Max. mould temperature	120	°C
Hold pressure range	50 - 100	MPa

(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	Heat stabilised or stable to heat

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Ford	WSB-M4D678-A	
General Motors	GMW17810P-PA66-GF40	Black

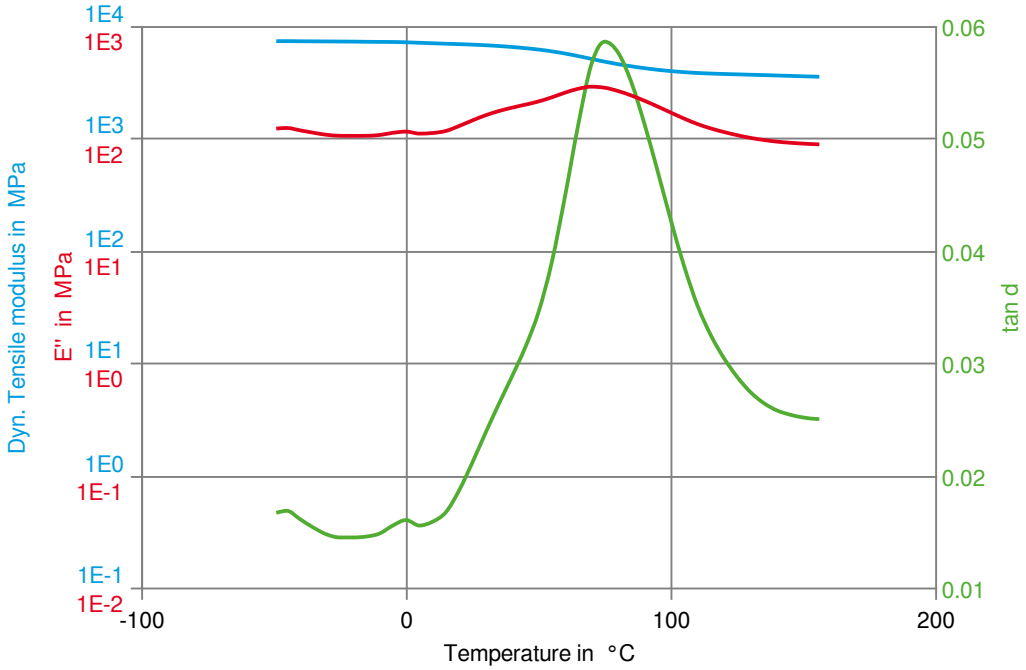
Dynamic Tensile modulus-temperature (dry)

(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre



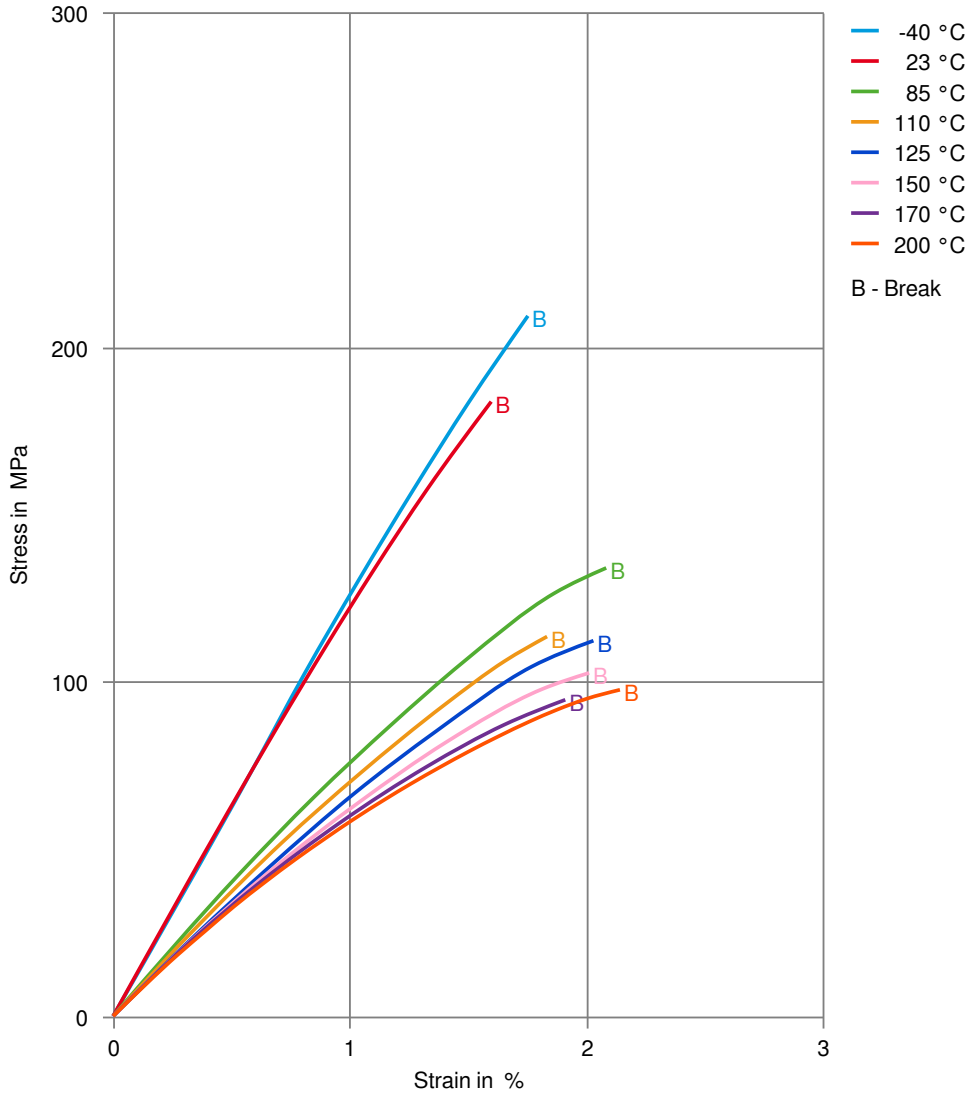
(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

Stress-strain (dry)



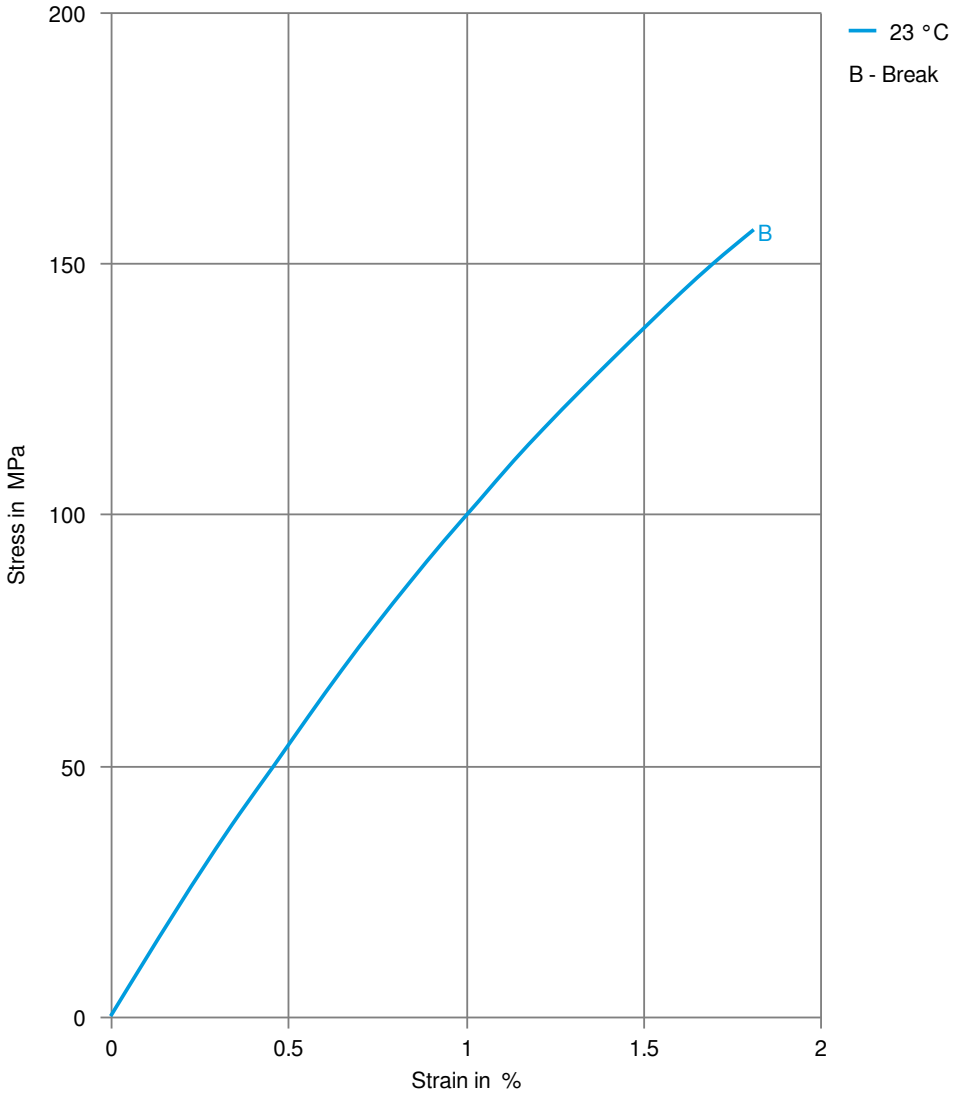
(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

Stress-strain (cond.)



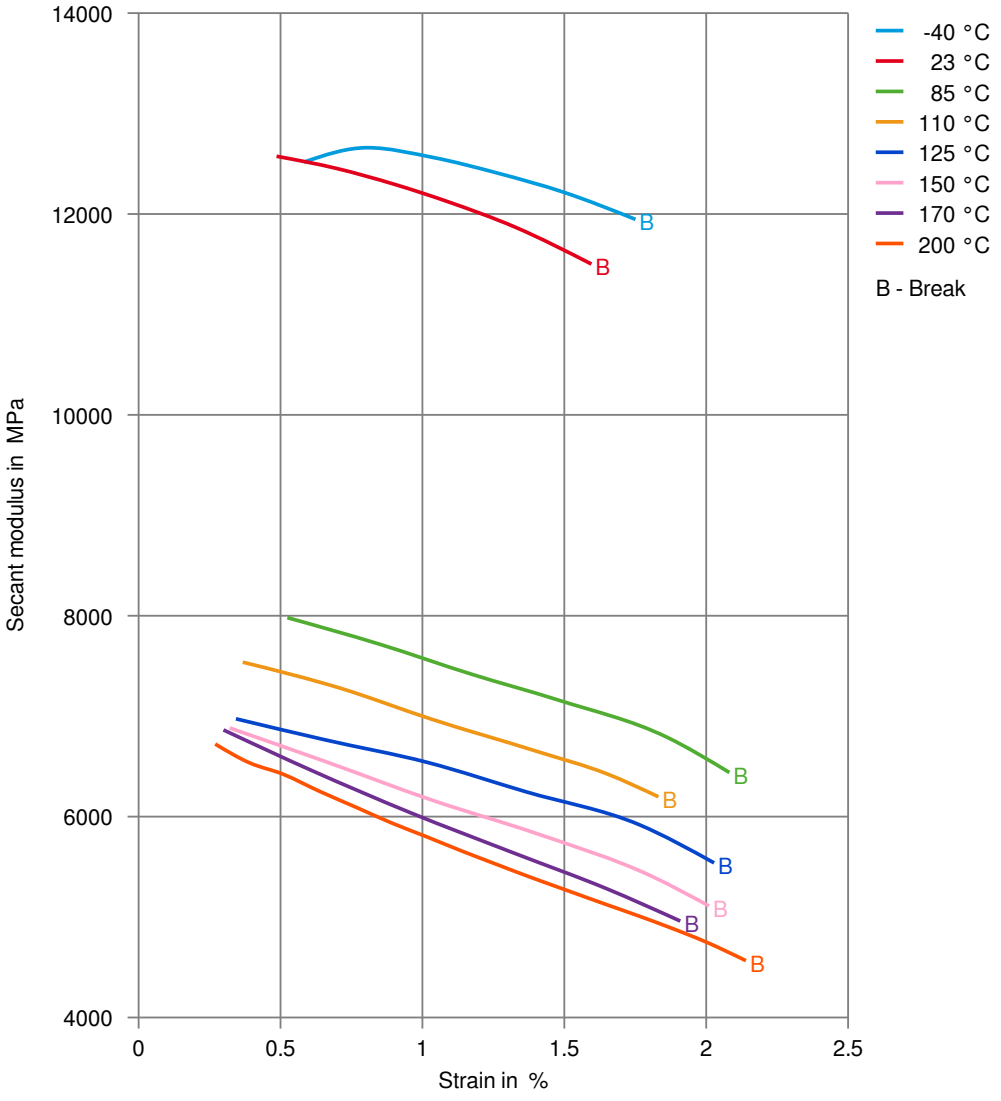
(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

Secant modulus-strain (dry)



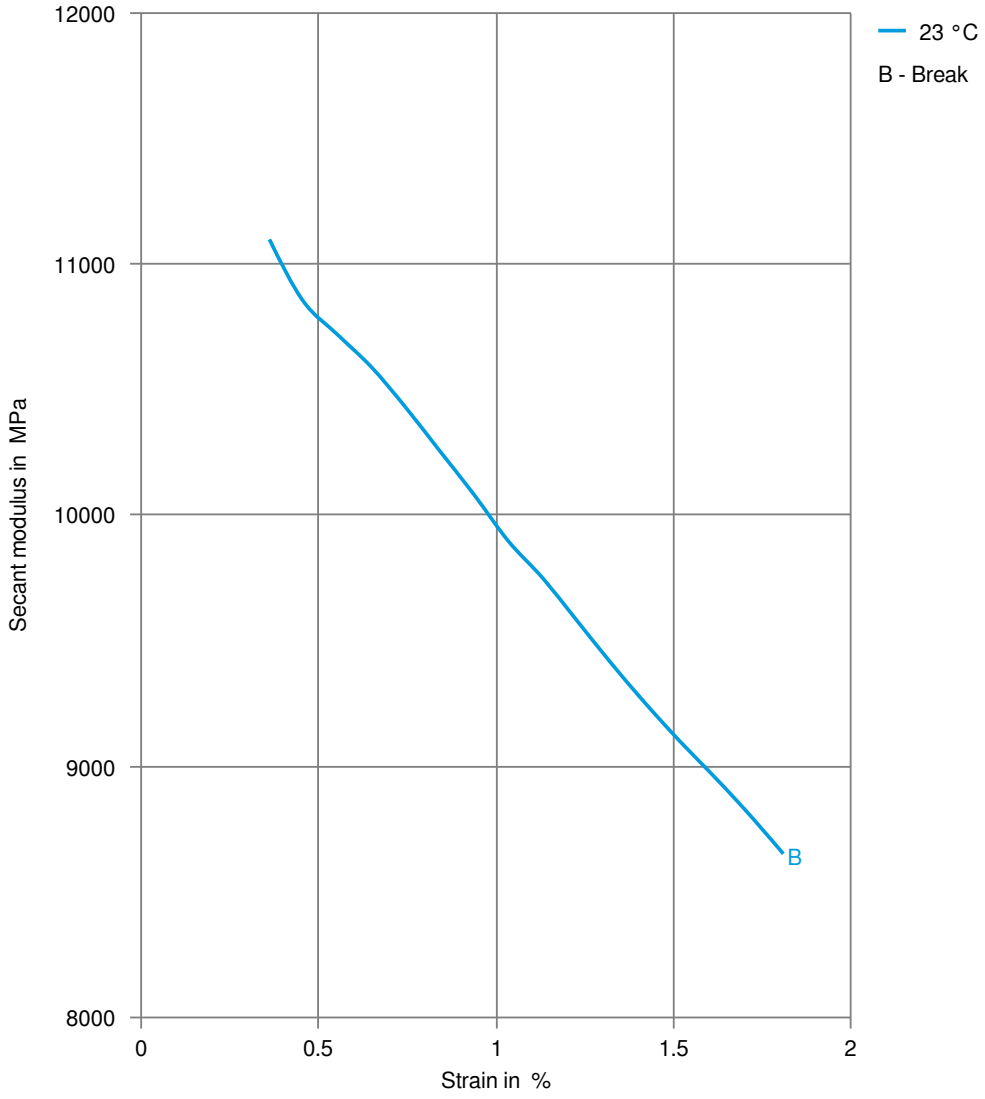
(+) 18816996168
Ponciplastics.com

Celanese
The chemistry inside innovation™

CELSTRAN® PA66-GF40-02 AD3002 BLACK

CELSTRAN® Long Fibre

Secant modulus-strain (cond.)



Revised: 2025-05-15 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.