

TECNOPRENE® HF GF/20 V0

TECNOPRENE®

Polypropylene, homopolymer, 20% glass fiber reinforced, chemically coupled, V0, halogen free, laser markable

Product information

Resin Identification	PP-GF20 FR(40)	ISO 1043
Part Marking Code	>PP-GF20 FR(40)<	ISO 11469

Rheological properties

Melt mass-flow rate	4 g/10min	ISO 1133
Melt mass-flow rate, Temperature	230 °C	
Melt mass-flow rate, Load	2.16 kg	
Moulding shrinkage range, parallel	0.3 - 0.6 %	ISO 294-4, 2577
Moulding shrinkage range, normal	0.7 - 0.9 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	6500 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	66 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3 %	ISO 527-1/-2
Flexural modulus	6200 MPa	ISO 178
Charpy impact strength, 23 °C	30 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30 °C	24 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	6.5 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	5 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.35 ^[C]	

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	137 °C	ISO 75-1/-2
Vicat softening temperature, 50 °C/h 50N	135 °C	ISO 306
Coefficient of linear thermal expansion (CLTE), parallel	35 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	128 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	IEC 60695-11-10
Thickness tested	1.6 mm	IEC 60695-11-10
UL recognition	yes	UL 94
Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	3.2 mm	IEC 60695-11-10
FMVSS Class	DNI	ISO 3795 (FMVSS 302)

Electrical properties

Volume resistivity	3.7E13 Ohm.m	IEC 62631-3-1
Surface resistivity	5.9E15 Ohm	IEC 62631-3-2
Electric strength	39.9 kV/mm	IEC 60243-1
Relative permittivity, printed circuits and boards, 2.5 GHz	3.3	IEC 61189-2-721

TECNOPRENE® HF GF/20 V0

TECNOPRENE®

Dissipation factor, printed circuits and boards, 2.5
GHz

44 E-4

IEC 61189-2-721

Physical/Other properties

Density

1240 kg/m³

ISO 1183

Injection

Ejection temperature

113 °C

Characteristics

Processing

Injection Moulding

Additives

Flame retardant

Special characteristics

Flame retardant, Laser Markable

Additional information

Processing Notes

Storage

This product should be stored in a covered facility and kept away from moisture and heat.

Automotive

OEM

STANDARD

ADDITIONAL INFORMATION

VW Group

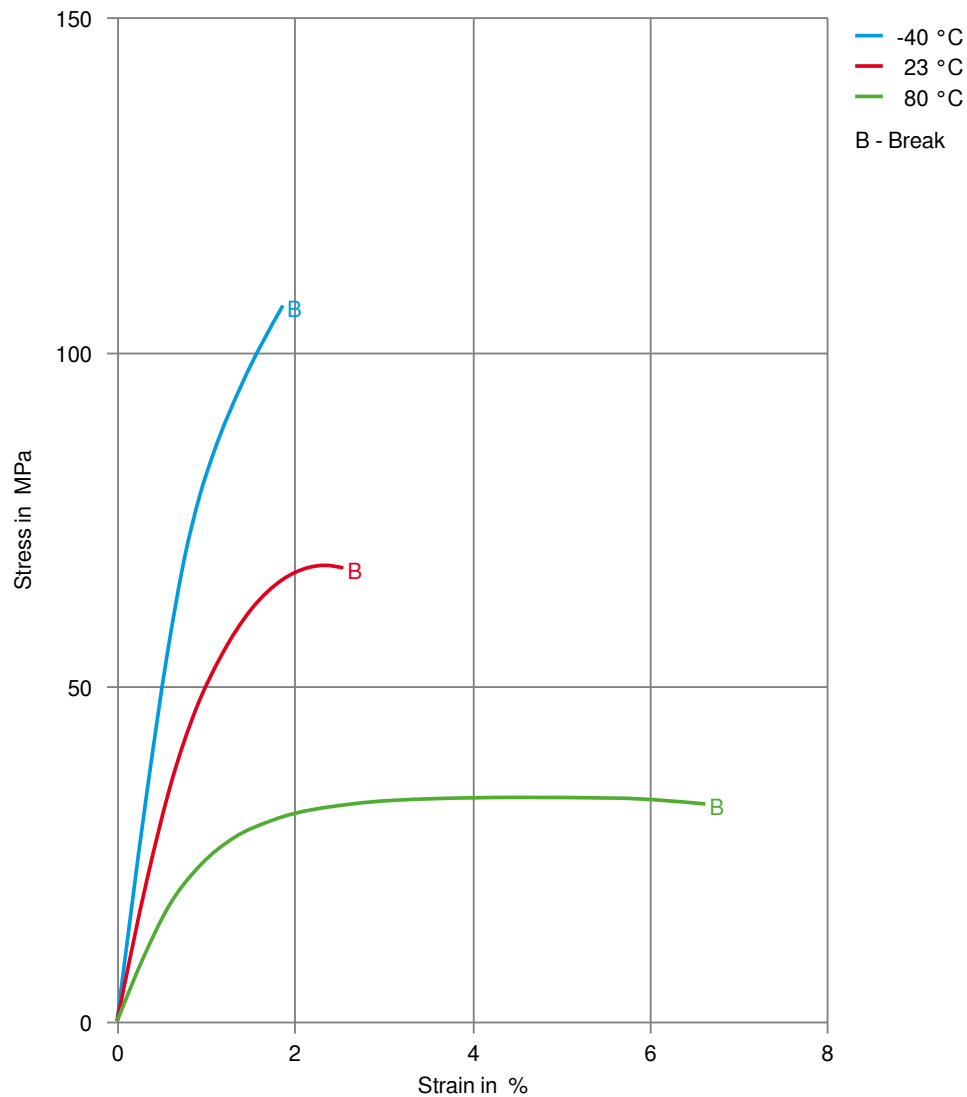
VW 44045

Nero 900 (With Deviations)

TECNOPRENE® HF GF/20 V0

TECNOPRENE®

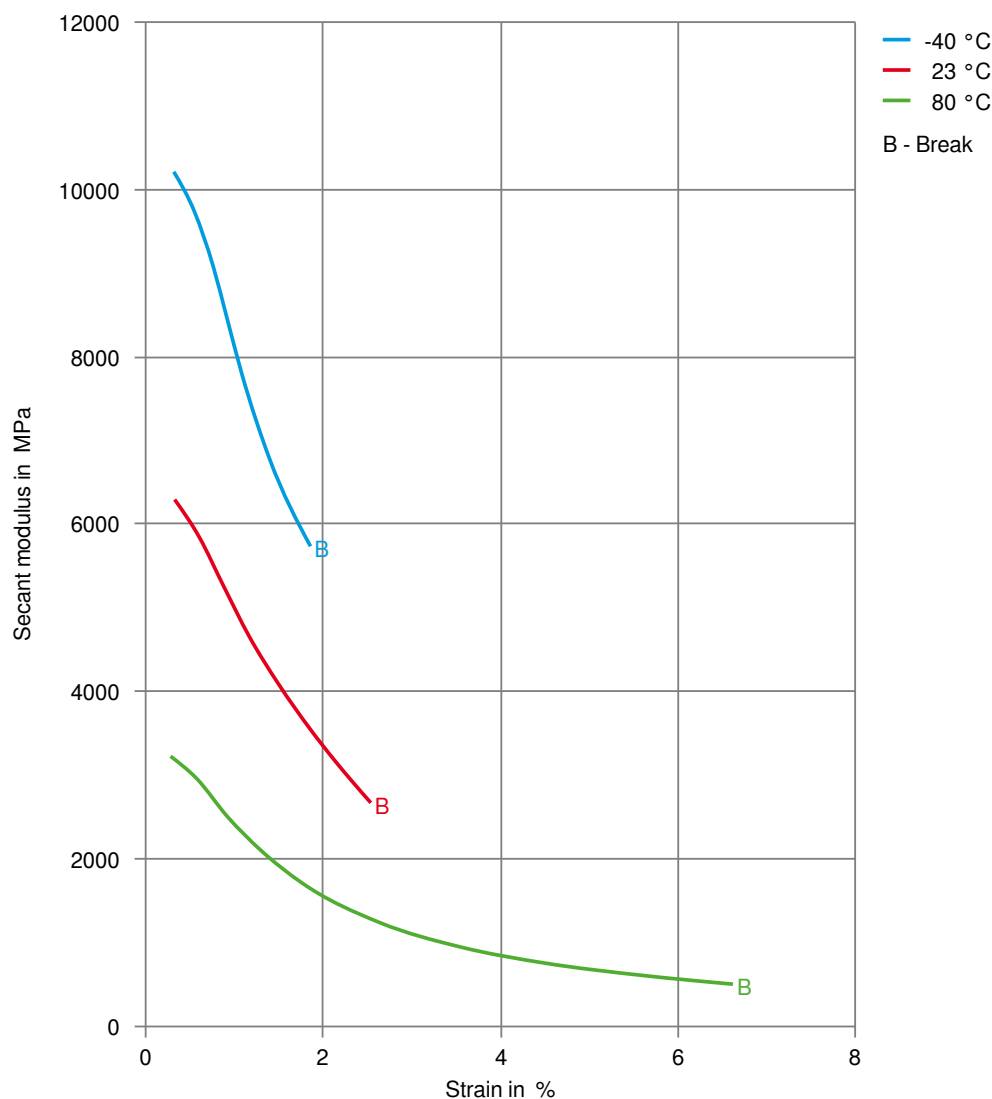
Stress-strain



TECNOPRENE® HF GF/20 V0

TECNOPRENE®

Secant modulus-strain



Printed: 2025-05-30

Page: 4 of 4

Revised: 2025-04-21 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.