

CELCON® GC20

Celcon® GC20 is a glass coupled formulation containing 20% glass fiber reinforcement for improved strength and stiffness (for even better mechanical properties; please consider Hostaform® C 9021 GV1/20).

Celcon® GC20 is a glass coupled formulation containing 20% glass fiber reinforcement for improved strength and stiffness (for even better mechanical properties, please consider Hostaform® C 9021 GV1/20). Chemical abbreviation according to ISO 1043-1: POM

Product information

Part Marking Code	POM	ISO 11469
-------------------	-----	-----------

Typical mechanical properties

Tensile Modulus	7300 MPa	ISO 527-1/-2
Stress at break, 5mm/min	99 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2.2 %	ISO 527-1/-2
Flexural Modulus	7000 MPa	ISO 178
Flexural Strength	130 MPa	ISO 178
Charpy impact strength, 23°C	30 kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	40 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	6 kJ/m ²	ISO 179/1eA
Izod notched impact strength, 23°C	5.2 kJ/m ²	ISO 180/1A

Thermal properties

Melting temperature, 10°C/min	165 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	160 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	43 E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	110 E-6/K	ISO 11359-1/-2

Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.8 %	Sim. to ISO 62
Density	1540 kg/m ³	ISO 1183

Injection

Drying Temperature	100 - 120 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Max. mould temperature	90 - 120 °C
Back pressure	2 MPa
Injection speed	slow

Processing Texts

Pre-drying	Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.
------------	---

CELCON® GC20

Other Approvals

Other Approvals

OEM	Specification
Ford	WSB-M4D883-A1

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.

© 2023 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.