

KEPITAL® F10-03H

A stiffness-improved(high-viscosity) grade for general injection molding
 - A stiffness-improved(high-viscosity) grade for general injection molding.
 - Features greater stiffness compared to general POM copolymer.

Rheological properties

Moulding shrinkage, parallel	2.2 %	ISO 294-4, 2577
------------------------------	-------	-----------------

Typical mechanical properties

Tensile Modulus	2800 MPa	ISO 527-1/-2
Yield stress, 50mm/min	68 MPa	ISO 527-1/-2
Yield strain, 50mm/min	12 %	ISO 527-1/-2
Nominal strain at break	40 %	ISO 527-1/-2
Flexural Modulus	2650 MPa	ISO 178
Flexural Strength	90 MPa	ISO 178
Charpy notched impact strength, 23°C	7 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	6.5 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.39	

Thermal properties

Melting temperature, 10°C/min	168 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	100 °C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	120 E-6/K	ISO 11359-1/-2

Electrical properties

Surface resistivity	>1E16 Ohm	IEC 62631-3-2
Electric strength	19 kV/mm	IEC 60243-1

Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Density	1410 kg/m ³	ISO 1183

Other Approvals

Other Approvals	OEM	Specification
	GM	GMW22P-POM-C1

KEPITAL® F10-03H

Printed: 2023-08-07

Page: 2 of 2

Revised: 2023-05-10 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.

© 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.