

Injection molding grade with extremely high flow

POM copolymer

Extremely easy flowing Injection molding type for very thin-walled precision molded parts with unfavourite flow-path-wall thickness relation; permits processing at reduced temperature and also shorter cycle times; for mechanical lower requirements; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high esistance to thermal and oxidative degradation. With UV Additives

Ranges of applications: For very thin-walled precision molded parts with unfavourite flow-path-wall thickness relation; permits processing at reduced temperature and also shorter cycle times.

### **Rheological properties**

i inochegical properties			
Melt volume-flow rate	39	cm <sup>3</sup> /10min	ISO 1133
Temperature	190	°C	
Load	2.16	kg	
Moulding shrinkage, parallel	1.9	%	ISO 294-4, 2577
Moulding shrinkage, normal	1.8	%	ISO 294-4, 2577
Typical mechanical properties			
Tensile Modulus	3000	MPa	ISO 527-1/-2
Yield stress, 50mm/min	65	MPa	ISO 527-1/-2
Yield strain, 50mm/min	7	%	ISO 527-1/-2
Nominal strain at break	15	%	ISO 527-1/-2
Flexural Modulus	2800	MPa	ISO 178
Tensile creep modulus, 1h	2500	MPa	ISO 899-1
Tensile creep modulus, 1000h	1300	MPa	ISO 899-1
Charpy impact strength, 23°C	150	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	150	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	5	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30 °C	5	kJ/m²	ISO 179/1eA
Ball indentation hardness, H 358/30	148	MPa	ISO 2039-1
Thermal properties			
Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	106	°C	ISO 75-1/-2
Vicat softening temperature, 50 °C/h, 50N	151	°C	ISO 306
Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
Thermal conductivity of melt	0.19	W/(m K)	Internal
Spec. heat capacity of melt	2060	J/(kg K)	Internal
Electrical properties			
Relative permittivity, 100Hz	4		IEC 62631-2-1
Relative permittivity, 1MHz	4		IEC 62631-2-1
Dissipation factor, 100Hz	-	E-4	IEC 62631-2-1
Dissipation factor, 1MHz		E-4	IEC 62631-2-1
	50		

Printed: 2023-08-07



Volume resistivity Surface resistivity Electric strength Comparative tracking index	1E14	Ohm.m Ohm kV/mm PLC	IEC 62631-3-1 IEC 62631-3-2 IEC 60243-1 UL 746A
Other properties			
Humidity absorption, 2mm	0.2	%	Sim. to ISO 62
Water absorption, 2mm	0.65	%	Sim. to ISO 62
Density	1410	kg/m³	ISO 1183
Density of melt	1200	kg/m <sup>3</sup>	Internal
Injection			
Drying Temperature	100 - 120	°C	
Drying Time, Dehumidified Dryer	3 - 4	h	
Processing Moisture Content	0.15	%	
Screw tangential speed	0.2 - 0.21	m/s	
Max. mould temperature	80 - 120	°C	
Back pressure	4	MPa	
Injection speed	slow-medium		
Ejection temperature	140	°C	Internal

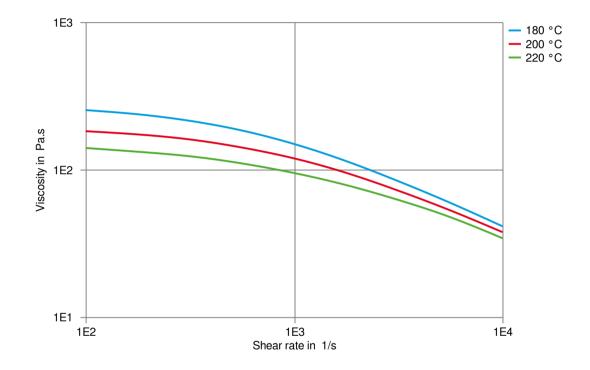
### **Characteristics**

Additives

Release agent

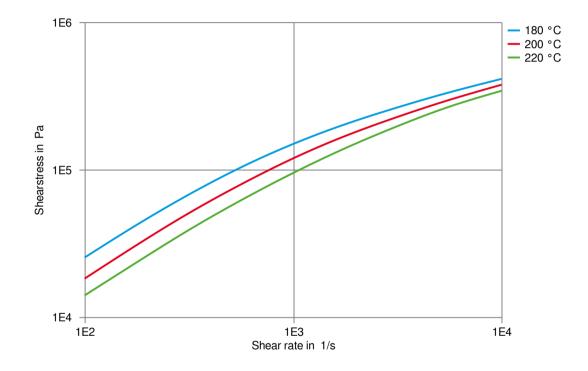


Viscosity-shear rate



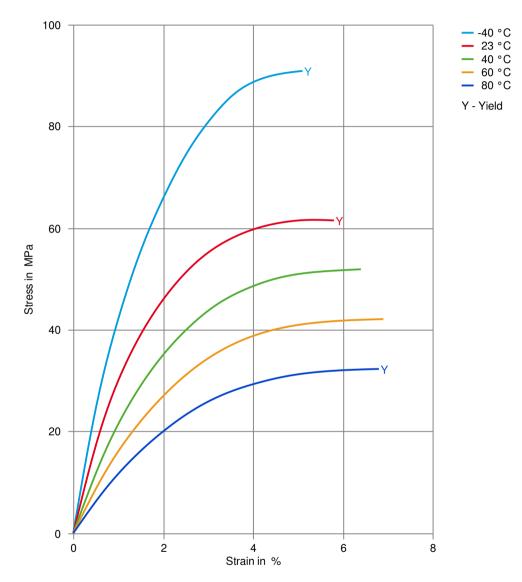


Shearstress-shear rate



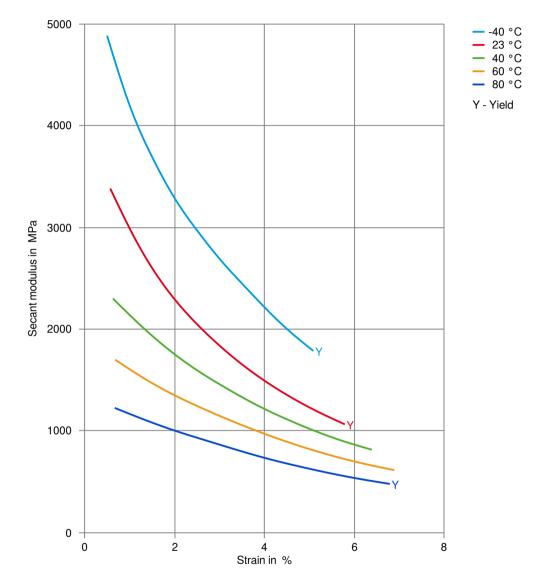


Stress-strain





### Secant modulus-strain





#### **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.

Longer pre-drying times/storage

The product can then be stored in standard conditions until processed.

#### Printed: 2023-08-07

Revised: 2023-02-23 Source: Celanese Materials Database

Page: 7 of 7

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, 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 as a promise or guarantee of specific properties of our groucts. 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 he 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 inductions 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 addi

© 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.