

# CAMPUS® Спецификация для

HOSTAFORM® C 27021 - POM  
Celanese



## Описание продукта

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNR, 05-002 POM copolymer Very easy flowing Injection molding type with high rigidity and hardness; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. Monomers and additives are listed in EU-Regulation (EU) 10/2011 FDA compliant according to 21 CFR 177.2470 UL-registration for all colours and a thickness more than 1.5 mm as UL 94 HB, temperature index UL 746 B electrical 110°C, mechanical 90°C. Burning rate ISO 3795 and FMVSS 302 < 75 mm/min for a thickness more than 1 mm. Ranges of applications: thin-walled molded parts with unfavourable flow-path-wall thickness relation; multicavity moulds; complicated precision molded parts; short cycle time. FDA = Food and Drug Administration (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA) UL = Underwriters Laboratories (USA)

Flammability @1.6mm nom. thickn.  
Flammability at thickness h (3 mm)

HB -  
HB UL recognition (h)

Реологические свойства	Значение	Единица	Стандарт
Показатель текучести расплава, MVR	24	cm <sup>3</sup> /10min	ISO 1133
Температура	190	°C	ISO 1133
Нагрузка	2.16	kg	ISO 1133
Усадка при литье, продольная	1.9	%	ISO 294-4, 2577
Усадка при литье, поперечная	1.8	%	ISO 294-4, 2577
Механические свойства	Значение	Единица	Стандарт
Модуль упругости при растяжении	2900	MPa	ISO 527-1/-2
Напряжение в точке текучести	65	MPa	ISO 527-1/-2
Удлинение в точке текучести	7.5	%	ISO 527-1/-2
Номинальное удлинение при разрыве	17	%	ISO 527-1/-2
Ударная прочность по Шарпи, +23°C	170	kJ/m <sup>2</sup>	ISO 179/1eU
Ударная прочность по Шарпи, -30°C	170	kJ/m <sup>2</sup>	ISO 179/1eU
Ударная прочность по Шарпи с надрезом, +23°C	5.5	kJ/m <sup>2</sup>	ISO 179/1eA
Ударная прочность по Шарпи с надрезом, -30°C	5.5	kJ/m <sup>2</sup>	ISO 179/1eA
Тепловые Свойства	Значение	Единица	Стандарт
Температура плавления, 10°C/min	166	°C	ISO 11357-1/-3
Температура изгиба под нагрузкой, 1.80 MPa	106	°C	ISO 75-1/-2
Температура размягчения по Вика, 50°C/h 50N	151	°C	ISO 306
Коэффициент линейного теплового расширения, продольная	110	E-6/K	ISO 11359-1/-2
Поведение при горении при номинальной толщине 1.5 мм	HB	class	IEC 60695-11-10
Толщина испытываемого образца	1.5	mm	IEC 60695-11-10
Поведение при горении при толщине образца h	HB	class	IEC 60695-11-10
Толщина испытываемого образца	3.0	mm	IEC 60695-11-10
желтая карточка (Yellow Card)	Yes	-	-
Электрические свойства	Значение	Единица	Стандарт
Относительная электрическая проницаемость, 100Hz	4	-	IEC 62631-2-1
Относительная электрическая проницаемость, 1MHz	4	-	IEC 62631-2-1
Фактор рассеивания, 100Hz	25	E-4	IEC 62631-2-1
Фактор рассеивания, 1MHz	50	E-4	IEC 62631-2-1
Величина удельного сопротивления	1E12	Ohm*m	IEC 62631-3-1
Поверхностное сопротивление	1E14	Ohm	IEC 62631-3-2

# HOSTAFORM® C 27021 - POM

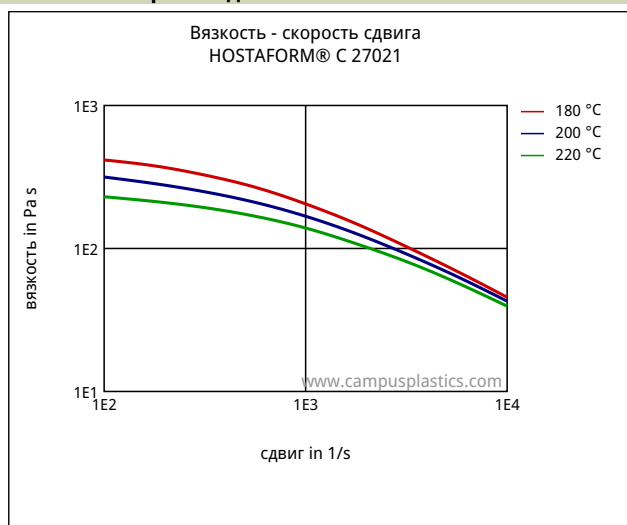
## Celanese

Электрическая прочность **35** kV/mm IEC 60243-1

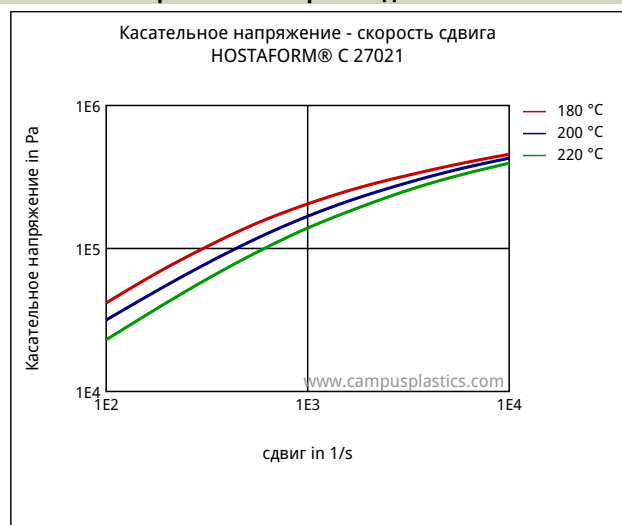
Другие свойства	Значение	Единица	Стандарт
Водопоглощение	<b>0.65</b>	%	Sim. to ISO 62
Поглощение влаги	<b>0.2</b>	%	Sim. to ISO 62
Плотность	<b>1410</b>	kg/m <sup>3</sup>	ISO 1183
Реологические свойства	Значение	Единица	Стандарт
Плотность расплава	<b>1200</b>	kg/m <sup>3</sup>	-
Термопроводность расплава	<b>0.155</b>	W/(m K)	-
Спец. теплоемкость расплава	<b>2210</b>	J/(kg K)	-
Температура при съеме с пресс-формы	<b>140</b>	°C	-

### Диаграммы

#### Вязкость - скорость сдвига



#### Касательное напряжение - скорость сдвига

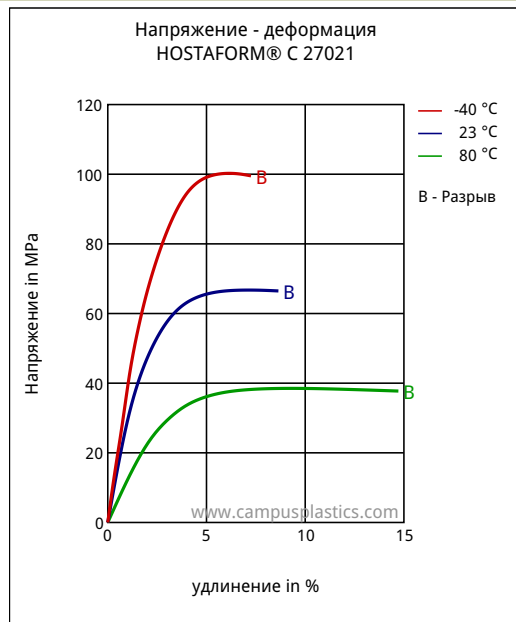


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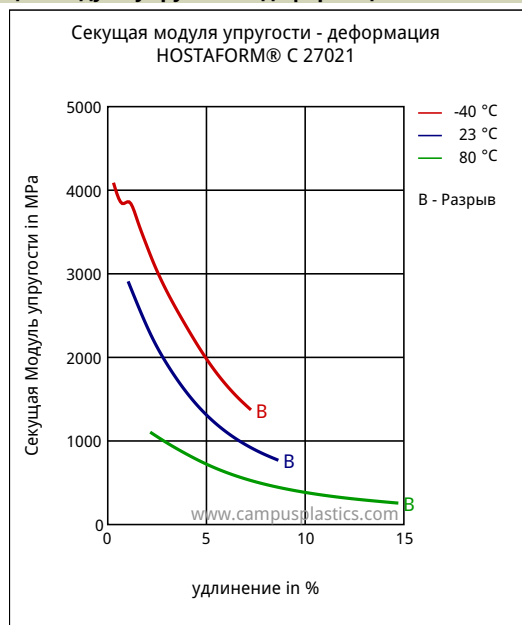
## Динамический модуль сдвига - температура



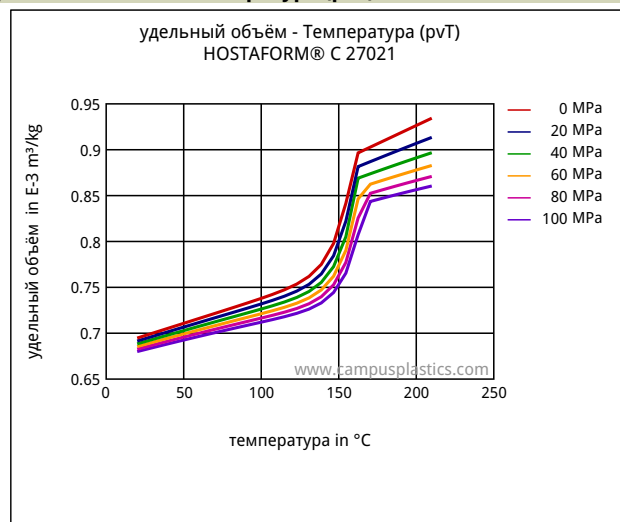
## Напряжение - деформация



## Секущая модуля упругости - деформация



## удельный объём - Температура (pvT)



## характеристики

### Переработка

Литье под давлением

### Вид поставки

Гранулы

### Добавки

Добавка обеспечивающая лучший съём изделия с прессформы

## Другая текстовая информация

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#### Литье под давлением

General drying is not necessary due to low moisture absorption of the resin.

In case of bad storage conditions (water contact or condensed water) the use of a recirculating air dryer (100 to 120 °C / max. 40 mm layer / 3 to 6 hours) is recommended.

Max. Water content 0,2 %  
Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Conditioning e.g. moisturizing is not necessary.

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. Colorants or other additives may cause significant variations in data values. Properties of molded 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. 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. The products mentioned herein are not intended for use in medical or dental implants.