

HOSTAFORM® C 9021 10/1570 - POM

Description

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 9988- POM-K, M-GCL, 03-002 POM copolymer Standard Injection molding type, UV-stabilized with carbon black; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. UL-registration for 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 < 100 mm/min for a thickness more than 1 mm. Ranges of applications: exterior applications. UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

Physical properties	Value	Unit	Test Standard
Density	1420	kg/m ³	ISO 1183
Melt volume rate, MVR	8	cm ³ /10min	ISO 1133
MVR temperature	190	°C	ISO 1133
MVR load	2.16	kg	ISO 1133
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Molding shrinkage, normal	1.8	%	ISO 294-4, 2577
Water absorption, 23°C-sat	0.65	%	ISO 62
Humidity absorption, 23°C/50%RH	0.2	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	3000	MPa	ISO 527-2/1A
Tensile stress at yield, 50mm/min	64	MPa	ISO 527-2/1A
Tensile strain at yield, 50mm/min	8	%	ISO 527-2/1A
Tensile nominal strain at break, 50mm/min	25	%	ISO 527-2/1A
Tensile creep modulus, 1h	2500	MPa	ISO 899-1
Tensile creep modulus, 1000h	1400	MPa	ISO 899-1
Charpy impact strength, 23°C	110	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	110	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	6	kJ/m ²	ISO 179/1eA

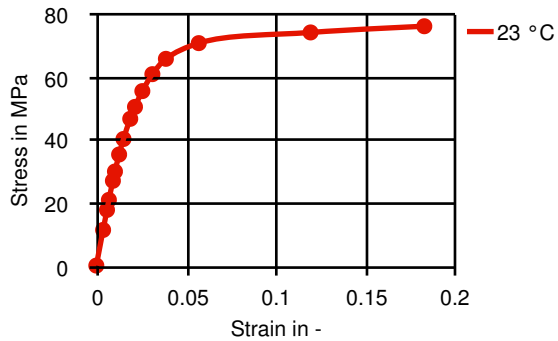
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	167	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	105	°C	ISO 75-1, -2
Vicat softening temperature, 50°C/h 50N	150	°C	ISO 306
Coeff. of linear therm expansion, parallel	1.1	E-4/°C	ISO 11359-2
Flammability @1.6mm nom. thickn.	HB	class	UL 94
thickness tested (1.6)	1.5	mm	UL 94
UL recognition (1.6)	UL	-	UL 94
Flammability at thickness h	HB	class	UL 94
thickness tested (h)	3.00	mm	UL 94
UL recognition (h)	UL	-	UL 94

Electrical properties	Value	Unit	Test Standard
Volume resistivity	1E12	Ohm*m	IEC 60093
Surface resistivity	1E14	Ohm	IEC 60093
Electric strength	28	kV/mm	IEC 60243-1
Comparative tracking index	300	-	IEC 60112

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Diagrams

True Stress-strain



Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Drying time	3 - 4	h	-
Drying temperature	100 - 120	°C	-

Other text information

Injection molding

Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

Melt temperature 190-210 °C
Mould temperature 80-120 °C

Characteristics

Special Characteristics	Delivery Form
Light stabilized, UV resistant	Pellets
Product Categories	Additives
Specialty	Release agent

Processing

Injection molding

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General Disclaimer

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.

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