

IEC 62631-2-1

IEC 62631-2-1

IEC 62631-2-1

IEC 62631-2-1

IEC 62631-3-1

# HOSTAFORM® C 9021 M XAP®2

with molybdenum disulphide modified, low emission

POM copolymer

Injection molding type, modified with molybdenum disulphide; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation.

Reduced emission grade. Emissions according to VDA 275 < 5 mg/kg

Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm.

Ranges of applications: For sliding combinations with high surface pressure and low sliding speed, only slight tendency to stick-slip.

**Preliminary Datasheet** 

### Rheological properties

Melt volume-flow rate Temperature Load	8.5 190 2.16	-	ISO 1133
Moulding shrinkage, parallel	2.0	· ·	ISO 294-4, 2577
Moulding shrinkage, normal	1.8	%	ISO 294-4, 2577
Typical mechanical properties			
Tensile Modulus	2650	MPa	ISO 527-1/-2
Yield stress, 50mm/min	64	MPa	ISO 527-1/-2
Yield strain, 50mm/min	9	%	ISO 527-1/-2
Nominal strain at break	20	%	ISO 527-1/-2
Flexural Modulus	2600	MPa	ISO 178
Tensile creep modulus, 1h	2300	MPa	ISO 899-1
Tensile creep modulus, 1000h	1100	MPa	ISO 899-1
Charpy impact strength, 23°C		kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C		kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	6	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m²	ISO 179/1eA
Ball indentation hardness, H 358/30	140	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	100	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h, 50N	150	°C	ISO 306
Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
Electrical properties			

Printed: 2023-08-07 Page: 1 of 5

4.2

4.2

25 E-4

80 E-4

1E12 Ohm.m

Revised: 2023-05-21 Source: Celanese Materials Database

Relative permittivity, 100Hz

Relative permittivity, 1MHz

Dissipation factor, 100Hz

Dissipation factor, 1MHz

Volume resistivity



Surface resistivity	1E14 Ohm	IEC 62631-3-2
Electric strength	35 kV/mm	IEC 60243-1
Comparative tracking index	PLC 0 PLC	UL 746A

## Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.75 %	Sim. to ISO 62
Density	1420 kg/m <sup>3</sup>	ISO 1183

## Injection

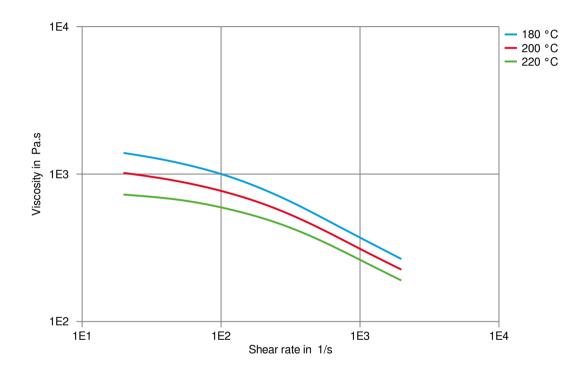
Drying Temperature	100 - 120	°C
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	0.15	%
Screw tangential speed	0.2 - 0.21	m/s
Max. mould temperature	80 - 120	°C
Back pressure	2	MPa
Injection speed	slow	

Printed: 2023-08-07 Page: 2 of 5

Revised: 2023-05-21 Source: Celanese Materials Database



### Viscosity-shear rate

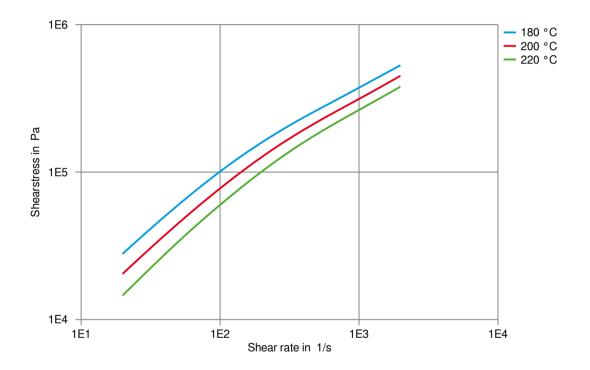


Printed: 2023-08-07 Page: 3 of 5

Revised: 2023-05-21 Source: Celanese Materials Database



#### Shearstress-shear rate



Printed: 2023-08-07 Page: 4 of 5

Revised: 2023-05-21 Source: Celanese Materials Database



#### **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.

#### Other Approvals

Other Approvals

OEM	Specification	Additional Information
BMW	GS 97014	2014-04
Mercedes-Benz Group (Daimler)	DBL 5404	BQF

Printed: 2023-08-07 Page: 5 of 5

Revised: 2023-05-21 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 e

© 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.