

Product Texts

Chemical abbreviation according to ISO 1043-1: POM Molding compound ISO 29988- POM-K, M-GNR, 06-002 POM copolymer
 Extremely easy flowing Injection molding type for very thin-walled precision molded parts with unfavourite flow-path-wallthickness 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 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 in natural a thickness more than 0.81 mm, in black a thickness more than 1.5 mm as UL 94 HB, temperature index UL 746 B for a thickness of 1.5 mm, electrical 105 °C, mechanical 90 °C Burning rate ISO 3795 and FMVSS 302 < 75 mm/min for a thickness more than 1 mm. Ranges of applications: For very thin-walled precision molded parts with unfavourite flow-path-wallthickness relation; permits processing at reduced temperature and also shorter cycle times. FDA = Food and Drug Administration (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA) UL = Underwriters Laboratories (USA)

Flammability @1.6mm nom. HB -
 thickn.
 Flammability at thickness h (0.81 HB UL recognition (h)
 mm)

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|-------|------------------------|-----------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 39 | cm ³ /10min | ISO 1133 |
| Temperature | 190 | °C | - |
| Load | 2.16 | kg | - |
| ^[C] Molding shrinkage, parallel | 1.9 | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 1.8 | % | ISO 294-4, 2577 |
| ^[C] Density of melt | 1200 | kg/m ³ | - |
| ^[C] Thermal conductivity of melt | 0.155 | W/(m K) | - |
| ^[C] Spec. heat capacity of melt | 2060 | J/(kg K) | - |
| ^[C] Ejection temperature | 140 | °C | - |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 3000 | MPa | ISO 527 |
| ^[C] Yield stress | 65 | MPa | ISO 527 |
| ^[C] Yield strain | 7 | % | ISO 527 |
| ^[C] Nominal strain at break | 15 | % | ISO 527 |
| ^[C] Charpy impact strength, +23°C | 150 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 150 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 5 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 5 | kJ/m ² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|--|-------|-------|-----------------|
| ISO Data | | | |
| ^[C] Melting temperature, 10°C/min | 166 | °C | ISO 11357-1/-3 |
| ^[C] Temp. of deflection under load, 1.80 MPa | 106 | °C | ISO 75-1/-2 |
| ^[C] Coeff. of linear therm. expansion, parallel | 110 | E-6/K | ISO 11359-1/-2 |
| ^[C] Burning Behav. at 1.5 mm nom. thickn. | HB | class | IEC 60695-11-10 |
| Thickness tested | 1.5 | mm | - |
| ^[C] Burning Behav. at thickness h | HB | class | IEC 60695-11-10 |
| Thickness tested | 0.8 | mm | - |
| Yellow Card available | yes | - | - |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|-------|------|---------------|
| ISO Data | | | |
| ^[C] Relative permittivity, 100Hz | 4 | - | IEC 62631-2-1 |

HOSTAFORM® C 52021

POM

Celanese

| | | | |
|--|-------------|-------|---------------|
| ^[C] Relative permittivity, 1MHz | 4 | - | IEC 62631-2-1 |
| ^[C] Dissipation factor, 100Hz | 30 | E-4 | IEC 62631-2-1 |
| ^[C] Dissipation factor, 1MHz | 50 | E-4 | IEC 62631-2-1 |
| ^[C] Volume resistivity | 1E12 | Ohm*m | IEC 62631-3-1 |
| ^[C] Surface resistivity | 1E14 | Ohm | IEC 62631-3-2 |
| ^[C] Electric strength | 35 | kV/mm | IEC 60243-1 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|------------------------------------|-------------|-------------------|----------------|
| ^[C] Water absorption | 0.65 | % | Sim. to ISO 62 |
| ^[C] Humidity absorption | 0.2 | % | Sim. to ISO 62 |
| ^[C] Density | 1410 | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|------------------|------|---------------|
| Pre-drying - Temperature | 100 - 120 | °C | - |
| Pre-drying - Time | 3 - 6 | h | - |
| Processing humidity | ≤0.2 | % | - |
| Melt temperature | 190 - 210 | °C | - |
| Mold temperature | 80 - 120 | °C | - |

Characteristics**Processing**

Injection Molding

Delivery form

Pellets, Black, Natural Color

Additives

Release agent

Features

Thermal Stability, Copolymer

Chemical Resistance

Alkali Resistance, Solvent Resistance, Hydrolytically Stable, Oxidation Resistance

Certifications

Food contact, Food approval 10/2011, Food approval FDA 21 CFR, Drinking water contact

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding**

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.