

# HOSTAFORM® C 13021 FC

## HOSTAFORM®

Chemical abbreviation according to ISO 1043-1: POM Molding compound 29988- POM-K, M-GNR, 03-002 POM copolymer easy flowing injection molding type with high rigidity, hardness and toughness; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. The products are in compliance with EU regulations (EC) No 1935/2004, (EC) No 2023/2006 and (EU) 10/2011, USA FDA 21 CFR Titles 174 - 199, and Chinese food contact regulations GB4806.1, GB31603 and GB9685.

Ranges of applications: automotive engineering, precision engineering, electric and electronical industry, domestic appliances.

### Product information

|                      |       |           |
|----------------------|-------|-----------|
| Resin Identification | POM   | ISO 1043  |
| Part Marking Code    | >POM< | ISO 11469 |

### Rheological properties

|                       |                           |          |
|-----------------------|---------------------------|----------|
| Melt volume-flow rate | 13 cm <sup>3</sup> /10min | ISO 1133 |
| Temperature           | 190 °C                    |          |
| Load                  | 2.16 kg                   |          |

### Typical mechanical properties

|                                       |                     |              |
|---------------------------------------|---------------------|--------------|
| Tensile modulus                       | 2700 MPa            | ISO 527-1/-2 |
| Tensile stress at yield, 50mm/min     | 64 MPa              | ISO 527-1/-2 |
| Tensile strain at yield, 50mm/min     | 10 %                | ISO 527-1/-2 |
| Nominal strain at break               | 30 %                | ISO 527-1/-2 |
| Charpy notched impact strength, 23 °C | 6 kJ/m <sup>2</sup> | ISO 179/1eA  |
| Poisson's ratio                       | 0.38 <sup>[C]</sup> |              |

[C]: Calculated

### Thermal properties

|                                |        |                |
|--------------------------------|--------|----------------|
| Melting temperature, 10 °C/min | 166 °C | ISO 11357-1/-3 |
|--------------------------------|--------|----------------|

### Physical/Other properties

|         |                        |          |
|---------|------------------------|----------|
| Density | 1410 kg/m <sup>3</sup> | ISO 1183 |
|---------|------------------------|----------|

### Injection

|                                 |              |
|---------------------------------|--------------|
| Drying Recommended              | no           |
| Drying Temperature              | 100 °C       |
| Drying Time, Dehumidified Dryer | 3 - 4 h      |
| Processing Moisture Content     | ≤0.2 %       |
| Melt Temperature Optimum        | 200 °C       |
| Min. melt temperature           | 190 °C       |
| Max. melt temperature           | 210 °C       |
| Screw tangential speed          | ≤0.3 m/s     |
| Mold Temperature Optimum        | 100 °C       |
| Min. mould temperature          | 80 °C        |
| Max. mould temperature          | 120 °C       |
| Hold pressure range             | 60 - 120 MPa |
| Back pressure                   | 4 MPa        |

# HOSTAFORM® C 13021 FC

HOSTAFORM®

## Characteristics

|               |  |
|---------------|--|
| Processing    | Injection Moulding, Film Extrusion, Sheet Extrusion, Other Extrusion |
| Delivery form | Pellets  |
| Additives     | Release agent  |

## Additional information

Injection molding

### Preprocessing

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 %

### Processing

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

### Postprocessing

Conditioning e.g. moisturizing is not necessary.

Film extrusion

### Preprocessing

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 %

### Processing

Standard extruders with grooved feed zone and short compression screws (minimum 25 D) will fit.

# HOSTAFORM® C 13021 FC

HOSTAFORM®

Melt temperature 180-190 °C

## Postprocessing

Conditioning e.g. moisturizing is not necessary.

In case of very thick wall thickness profiles after-annealing it is recommended to reduce internal stress.

Annealing temperature 130-140 °C  
Annealing time 10 min/mm thickness

Other extrusion

## Preprocessing

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 %

## Processing

Standard extruders with grooved feed zone and short compression screws (minimum 25 D) will fit.

Melt temperature 180-190 °C

## Postprocessing

Conditioning e.g. moisturizing is not necessary.

In case of very thick wall thickness profiles after-annealing it is recommended to reduce internal stress.

Annealing temperature 130-140 °C  
Annealing time 10 min/mm thickness

Sheet extrusion

## Preprocessing

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

In case of bad storage conditions (water contact or condensed water)

# HOSTAFORM® C 13021 FC

## HOSTAFORM®

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 %

### Processing

Standard extruders with grooved feed zone and short compression screws (minimum 25 D) will fit.

Melt temperature 180-190 °C

### Postprocessing

Conditioning e.g. moisturizing is not necessary.

In case of very thick wall thickness profiles after-annealing it is recommended to reduce internal stress.

Annealing temperature 130-140 °C  
Annealing time 10 min/mm thickness

### Processing Notes

### 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.

### Storage

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