

# HOSTAFORM® C 9021 TF5

Injection molding type like C 9021, with PTFE modified

Hostaform® C 9021 TF5 is a standard flow low level polytetrafluoroethylene filled (PTFE) product designed for use in wear applications against plastics, metal, glass or ceramic mating surfaces where silicone lubricants can not be tolerated.

## Rheological properties

Melt volume-flow rate	8 cm <sup>3</sup> /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	2.1 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.8 %	ISO 294-4, 2577

## Typical mechanical properties

Tensile Modulus	2600 MPa	ISO 527-1/-2
Yield stress, 50mm/min	58 MPa	ISO 527-1/-2
Yield strain, 50mm/min	9 %	ISO 527-1/-2
Shear Modulus	962 MPa	ISO 6721
Charpy impact strength, 23°C	125 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	110 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	5.2 kJ/m <sup>2</sup>	ISO 179/1eA

## Thermal properties

Melting temperature, 10°C/min	166 °C	ISO 11357-1/-3
Temp. of deflection under load, 1.8 MPa	102 °C	ISO 75-1/-2

## Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Water absorption, 2mm	0.65 %	Sim. to ISO 62
Density	1440 kg/m <sup>3</sup>	ISO 1183

## Injection

Drying Temperature	100 - 120 °C	
Drying Time, Dehumidified Dryer	3 - 4 h	
Melt Temperature Optimum	190 °C	Internal
Max. mould temperature	80 - 120 °C	
Back pressure	2 MPa	
Injection speed	slow	

## Characteristics

Additives	Release agent
-----------	---------------

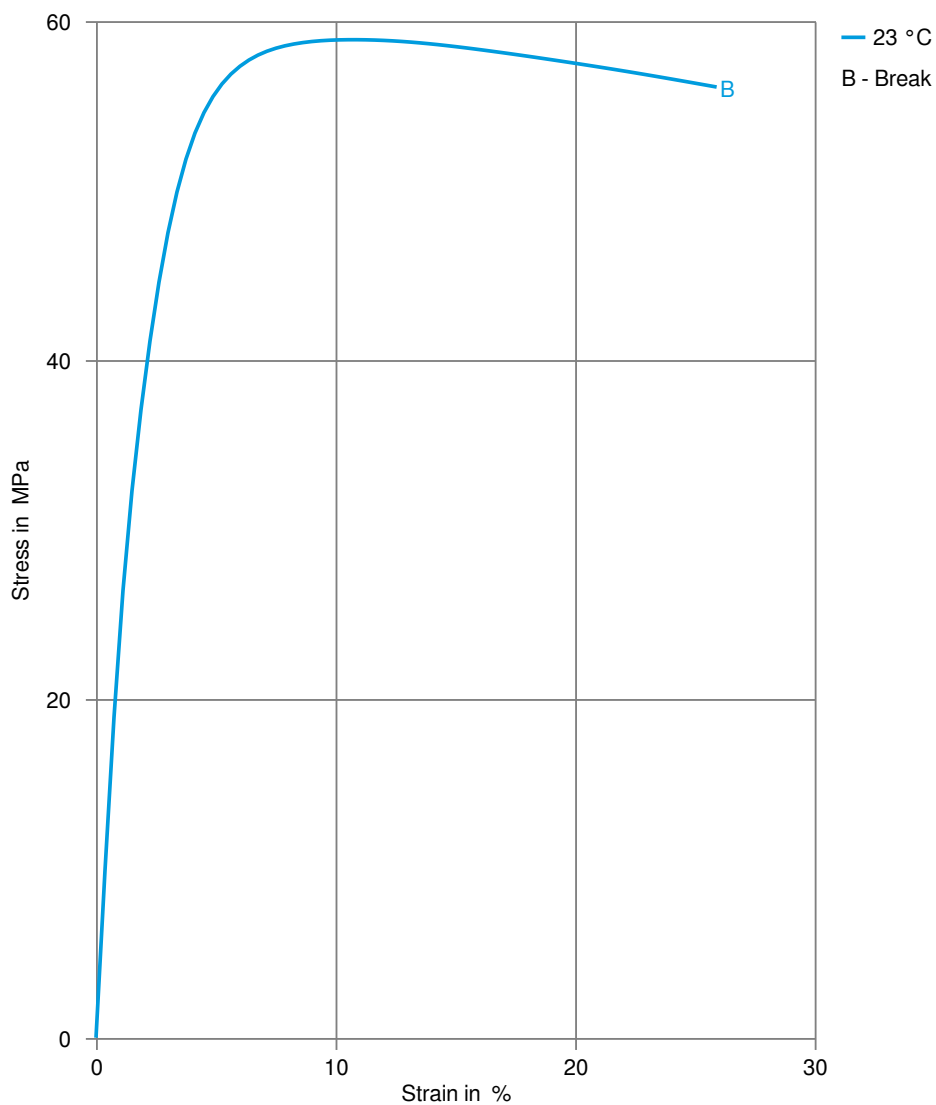
# HOSTAFORM® C 9021 TF5

## Additional information

Injection molding

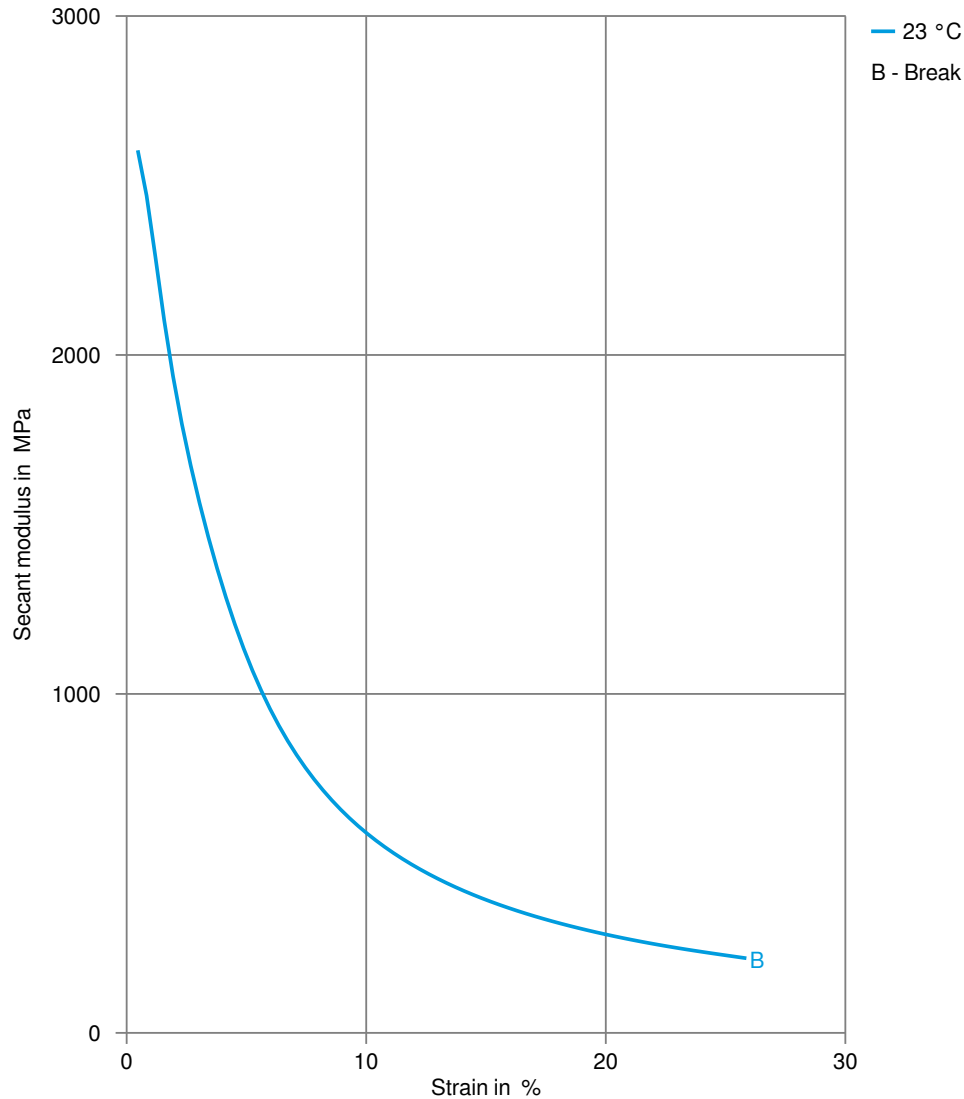
Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.

## Stress-strain



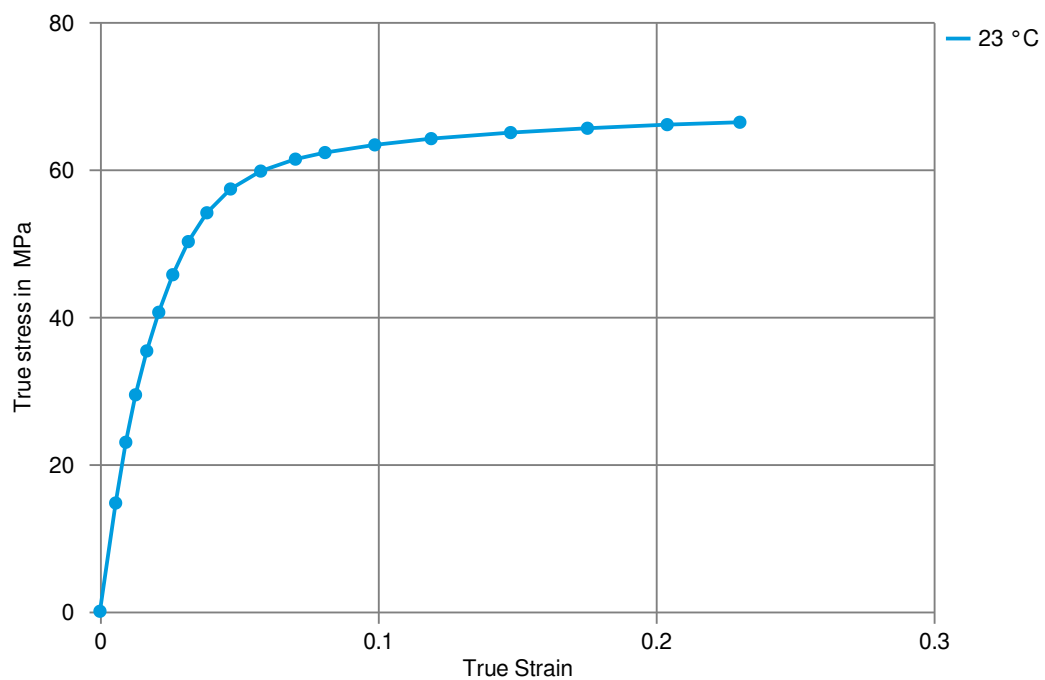
# HOSTAFORM® C 9021 TF5

## Secant modulus-strain



# HOSTAFORM® C 9021 TF5

## True stress-strain



# HOSTAFORM® C 9021 TF5

## 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.
Injection molding	Standard injection moulding machines with three phase (15 to 25 D) plasticating screws will fit.
Injection molding Preprocessing	<p>General drying is not necessary due to low moisture absorption of the resin.</p> <p>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.</p> <p>Max. Water content 0,2 %</p>
Injection molding Postprocessing	Conditioning e.g. moisturizing is not necessary.