

HOSTAFORM® S 27064

HOSTAFORM®

Chemical abbreviation according to ISO 1043-1: POM-HI Molding compound ISO 29988- POM-K, M-GNPR, 05-001 POM copolymer, modified Easy flowing, elastomer-containing injection molding type based on HOSTAFORM® C 27021 with high toughness, and slightly lower hardness, rigidity and chemical resistance than the basic type; high resistance to thermal and oxidative degradation. UL-registration in natural and a thickness more than 1.57 mm as UL 94 HB. Burning rate ISO 3795 and FMVSS 302 < 100 mm/min for a thickness more than 1 mm thickness. Ranges of applications: For thin-walled molded parts with high energy-absorbing capacity. UL = Underwriters Laboratories (USA) FMVSS = Federal Motor Vehicle Safety Standard (USA)

Product information

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

Rheological properties

Melt volume-flow rate	18 cm ³ /10min	ISO 1133
Temperature	190 °C	
Load	2.16 kg	
Moulding shrinkage, parallel	1.8 %	ISO 294-4, 2577
Moulding shrinkage, normal	1.7 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	1700 MPa	ISO 527-1/-2
Tensile stress at yield, 50mm/min	44 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	10 %	ISO 527-1/-2
Nominal strain at break	35 %	ISO 527-1/-2
Flexural modulus	1700 MPa	ISO 178
Tensile creep modulus, 1h	1400 MPa	ISO 899-1
Tensile creep modulus, 1000h	800 MPa	ISO 899-1
Charpy impact strength, 23 °C	150 ^[P] kJ/m ²	ISO 179/1eU
Charpy impact strength, -30 °C	110 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23 °C	11 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30 °C	6 kJ/m ²	ISO 179/1eA
Puncture energy, 23 °C	35 J	ISO 6603-2
Ball indentation hardness, H 358/30	90 MPa	ISO 2039-1
Poisson's ratio	0.42 ^[C]	

[P]: Partial Break

[C]: Calculated

Thermal properties

Melting temperature, 10 °C/min	166 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	77 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	130 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	HB class	IEC 60695-11-10
Thickness tested	1.6 mm	IEC 60695-11-10
Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	3.17 mm	IEC 60695-11-10

HOSTAFORM® S 27064

HOSTAFORM®

UL recognition	yes	UL 94
----------------	-----	-------

Electrical properties

Relative permittivity, 100Hz	4.4	IEC 62631-2-1
Relative permittivity, 1MHz	4.4	IEC 62631-2-1
Dissipation factor, 100Hz	100 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	200 E-4	IEC 62631-2-1
Volume resistivity	1E11 Ohm.m	IEC 62631-3-1
Surface resistivity	1E13 Ohm	IEC 62631-3-2
Electric strength	28 kV/mm	IEC 60243-1
Comparative tracking index	600	IEC 60112

Physical/Other properties

Humidity absorption, 2mm	0.25 %	Sim. to ISO 62
Water absorption, 2mm	0.65 %	Sim. to ISO 62
Density	1370 kg/m ³	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	65 °C
Min. mould temperature	60 °C
Max. mould temperature	70 °C
Hold pressure range	60 - 120 MPa
Back pressure	2 MPa
Ejection temperature	135 °C

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Additives	Release agent
Special characteristics	High impact or impact modified, High Flow

Additional information

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.

HOSTAFORM® S 27064

HOSTAFORM®

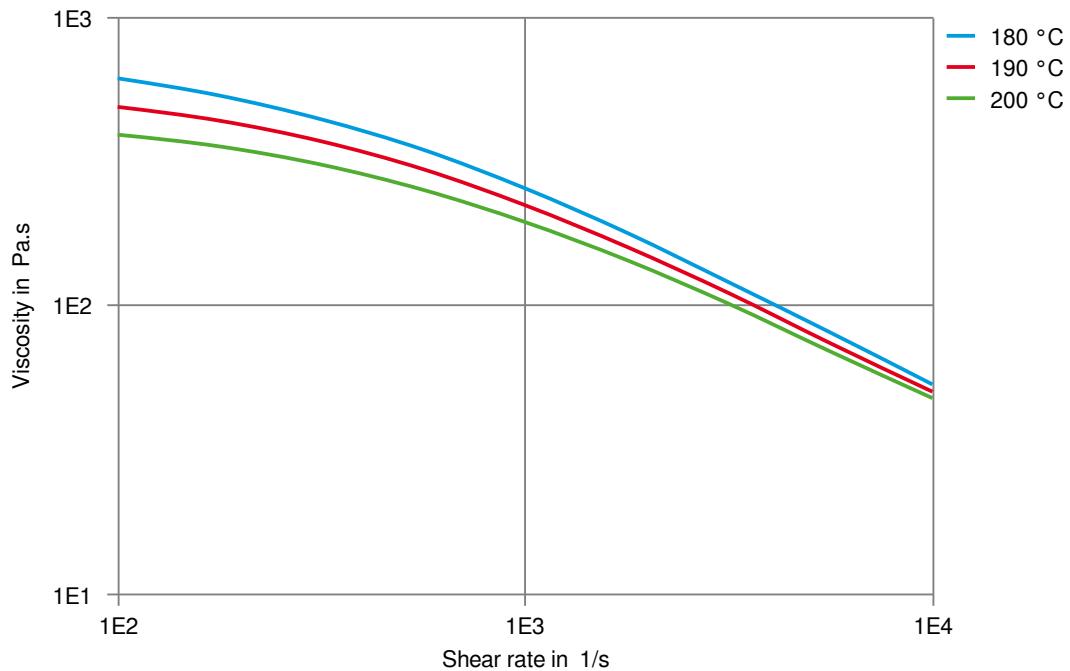
Storage

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

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
BMW	GS93016	
Ford	WSK-M4D618-A2	Natural
Ford	WSK-M4D618-A2	Black 12

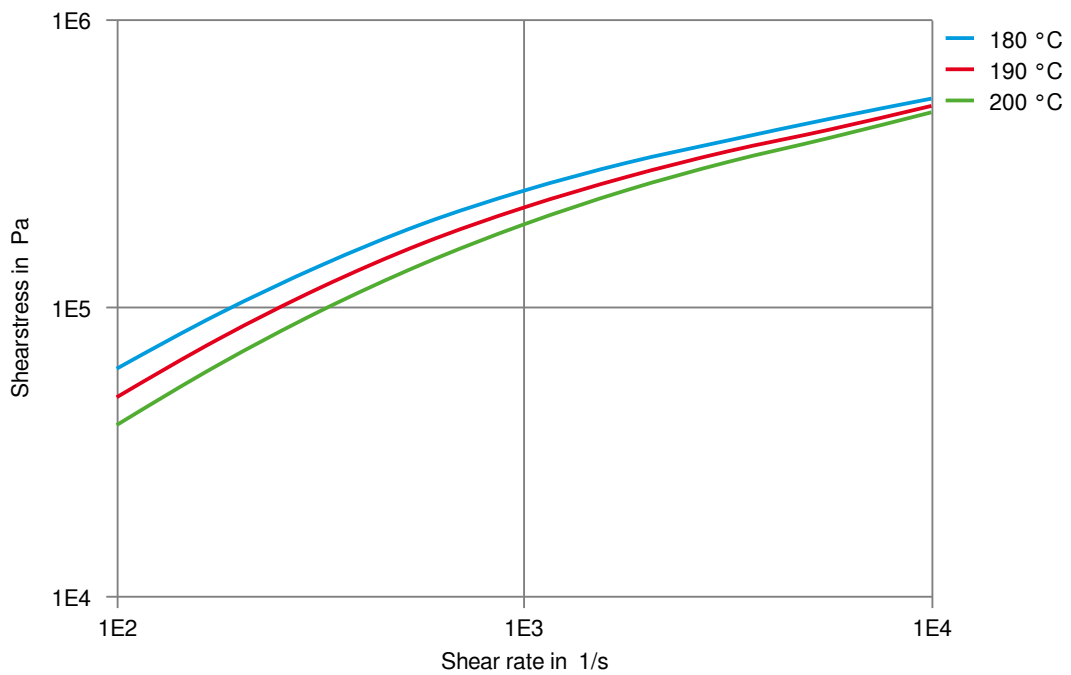
Viscosity-shear rate



HOSTAFORM® S 27064

HOSTAFORM®

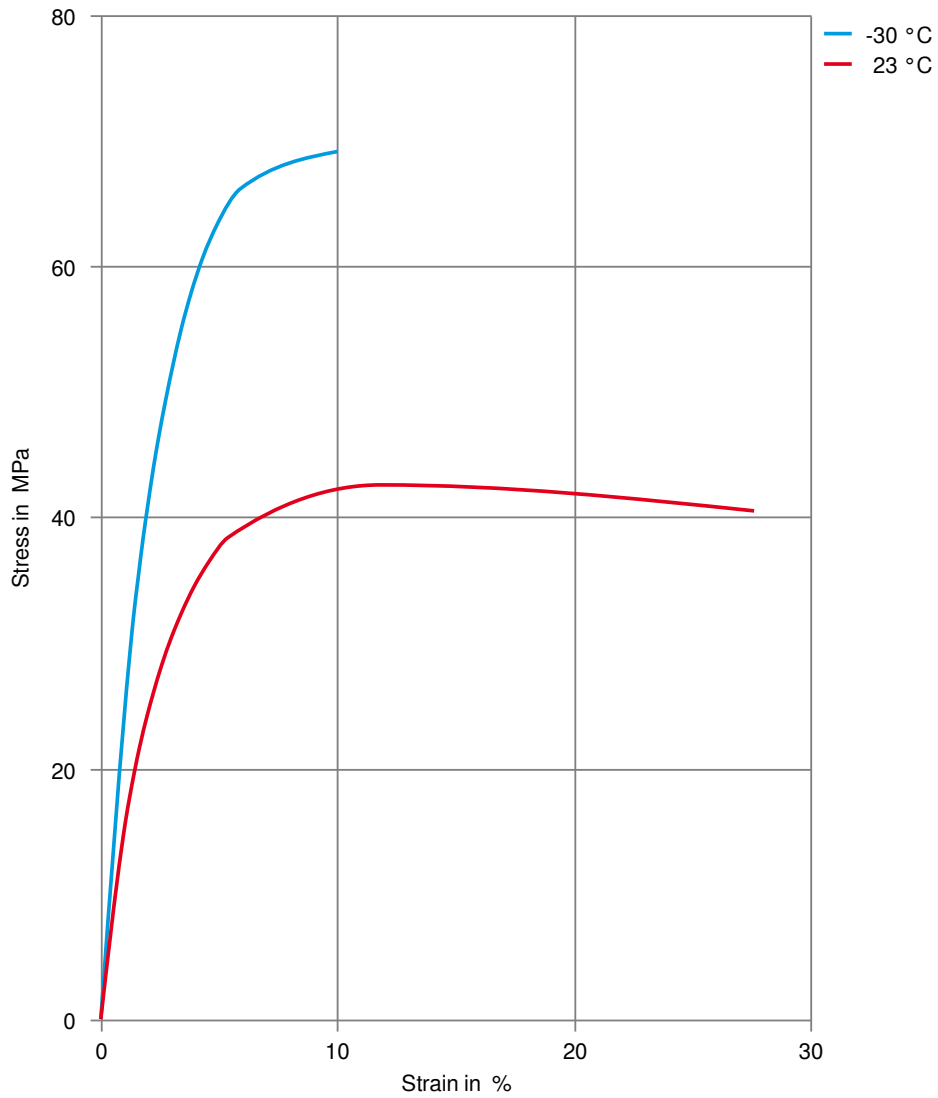
Shearstress-shear rate



HOSTAFORM® S 27064

HOSTAFORM®

Stress-strain



HOSTAFORM® S 27064

HOSTAFORM®

Secant modulus-strain

