HOSTAFORM® LX90GC15 | POM | Specialty

Description

Preliminary Data Sheet

Hostaform® LX90GC15 is a specialty metallic appearance acetal copolymer grade that is integrally colored and has a nominal 15% figer glass loading. This grade provides additional strength and stiffness over unfilled acetal grades while presenting a metal appearance surface.

Besides material, optimal finish for specialty metallic parts is dependent on proper drying, gate design, knit line locations, and special processing. Please contact Ticona Technical Service for assistance with your application.

Chemical abbreviation according to ISO 1043-1: POM

Physical properties	Value	Unit	Test Standard
Density	**1500**	kg/m³	ISO 1183
Mold shrinkage - parallel	**0.7**	%	ISO 294-4
Mold shrinkage - normal	**1.2**	%	ISO 294-4
Water absorption (23°C-sat)	**0.85**	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	**5500**	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	**75**	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	**4**	%	ISO 527-2/1A
Flexural modulus (23°C)	**5200**	MPa	ISO 178
Charpy notched impact strength @ 23°C	**4.0**	kJ/m²	ISO 179/1eA
Charpy notched impact strength @ -30°C	**4.0**	kJ/m²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	**166**	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	**155**	°C	ISO 75-1/-2
DTUL @ 0.45 MPa	**161**	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	**0.5**	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	**1**	E-4/°C	ISO 11359-2

Test specimen production	Value	Unit	Test Standard
Processing conditions acc. ISO	**9988**	-	Internal

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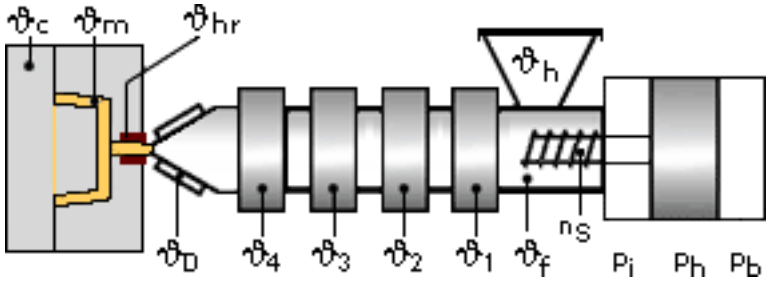
Typical injection moulding processing conditions



Pre Drying:

Necessary low maximum residual moisture content: 0.15%
Drying is required for this material to prevent poor appearance and performance of the part.
The product can then be stored in standard conditions until processed.

Drying time: 3 - 4 h

Drying temperature: 80 - 120 °C

Temperature:

	ϑManifold	ϑMold	ϑMelt	ϑNozzle	ϑZone4	ϑZone3	ϑZone2	ϑZone1	ϑFeed	ϑHopper
min (°C)	190	80	190	190	190	190	180	170	60	20
max (°C)	210	120	210	210	210	200	190	180	80	30

Pressure:

	Inj press	Hold press	Back pressure
min (bar)	600	600	0
max (bar)	1200	1200	5

Speed:

Injection speed: slow

Contact Information

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General Disclaimer

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. Colorants or other additives may cause significant variations in data values.
Properties of molded 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. 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.
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