

HOSTAFORM® LW90BSX | POM | Tribological

Description

Hostaform® LW90BSX is a specialty low wear grade of acetal copolymer designed for a wide range of tribological applications, including POM/POM pairings. This grade s low wear system includes silicone oil.

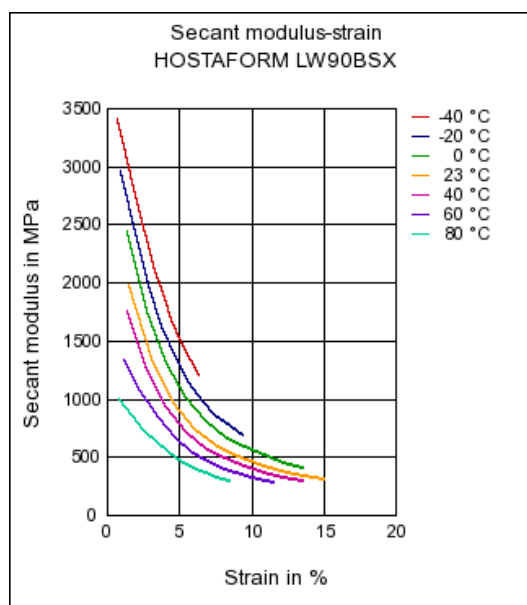
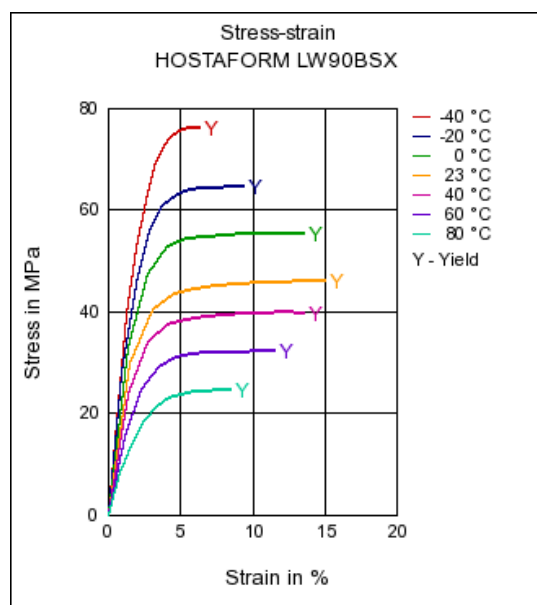
Physical properties	Value	Unit	Test Standard
Density	1370	kg/m ³	ISO 1183
Melt volume rate (MVR)	7	cm ³ /10min	ISO 1133
MVR test temperature	190	°C	ISO 1133
MVR test load	2.16	kg	ISO 1133

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	2350	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	51	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	15	%	ISO 527-2/1A
Nominal strain at break (50mm/min)	35	%	ISO 527-2/1A
Flexural modulus (23°C)	2250	MPa	ISO 178
Charpy impact strength @ 23°C	85.0	kJ/m ²	ISO 179/1eU
Charpy impact strength @ -30°C	75.0	kJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	5.5	kJ/m ²	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	90	°C	ISO 75-1/-2

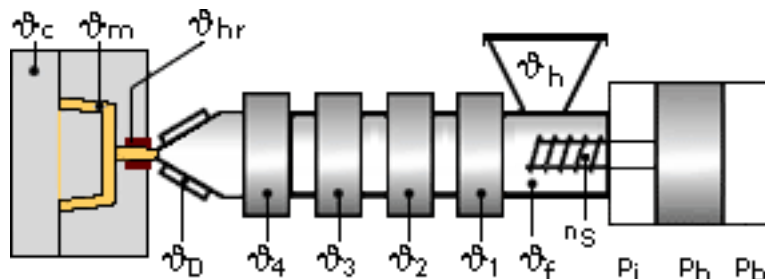
Stress-strain

Secant modulus-strain



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Typical injection moulding processing conditions



Pre Drying:

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

Drying time: 3 - 4 h

Drying temperature: 100 - 120 °C

Temperature:

	ϕ Manifold	ϕ Mold	ϕ Melt	ϕ Nozzle	ϕ Zone4	ϕ Zone3	ϕ Zone2	ϕ Zone1	ϕ Feed	ϕ Hopper
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

Screw speed

	16	25	40	55	75
Screw diameter (mm)	16	25	40	55	75
Screw speed (RPM)	-	150	100	70	-

Injection Molding

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

Melt temperature	190-230 °C
Mould temperature	80-120 °C

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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We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed (+49 (0) 69 30516299 for Europe and +1 859-372-3244 for the Americas) for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

The products mentioned herein are not intended for use in medical or dental implants.

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