

HOSTAFORM® AM90S | POM | Specialty

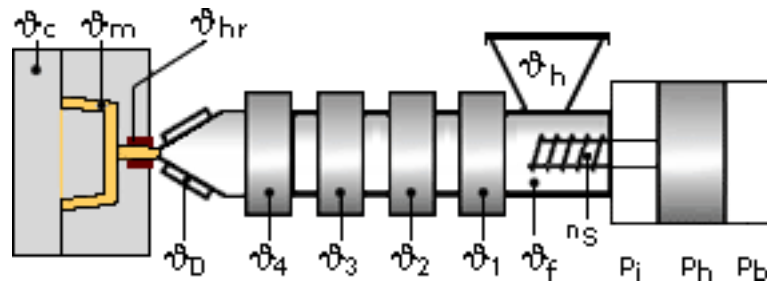
Description

Hostaform® acetal copolymer grade AM90S is a standard melt flow acetal copolymer grade containing an antimicrobial ingredient. Hostaform® AM90S provides the same physical and mechanical performance of standard Hostaform and Celcon acetal copolymer grades plus the added benefit of inhibiting bacterial growth.

Preliminary Data Sheet

Physical properties	Value	Unit	Test Standard
Density	1410	kg/m ³	ISO 1183
Melt volume rate (MVR)	8	cm ³ /10min	ISO 1133
MVR test temperature	190	°C	ISO 1133
MVR test load	2.16	kg	ISO 1133
Mold shrinkage - parallel	2.5	%	ISO 294-4
Mold shrinkage - normal	2.3	%	ISO 294-4
Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	2750	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	65	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	10	%	ISO 527-2/1A
Flexural modulus (23°C)	2650	MPa	ISO 178
Charpy notched impact strength @ 23°C	6.0	kJ/m ²	ISO 179/1eA
Charpy notched impact strength @ -30°C	5.5	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	167	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	98	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	1.1	E-4/°C	ISO 11359-2
Test specimen production	Value	Unit	Test Standard
Processing conditions acc. ISO	9988-2	-	Internal

Typical injection moulding processing conditions



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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.

Drying time: 3 h

Drying temperature: 80 - 100 °C

Temperature:

	↕Manifold	↕Mold	↕Melt	↕Nozzle	↕Zone4	↕Zone3	↕Zone2	↕Zone1
min (°C)	180	80	180	190	190	180	180	170
max (°C)	200	120	200	200	200	190	190	180

Pressure:

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

Speed:

Injection speed: slow-medium

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

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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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