

HOSTAFORM® S 9363 | POM | Impact Modified

Description

Preliminary Data Sheet

Hostaform® acetal copolymer grade S 9363 is an impact modified grade for demanding applications. Hostaform® S 9363 provides good impact strength while improving modulus and weld line strength over standard impact modified grades such as Hostaform® S 9064.

Chemical abbreviation according to ISO 1043-1: POM-HI

Physical properties	Value	Unit	Test Standard
Density	1380	kg/m ³	ISO 1183
Melt volume rate (MVR)	5.5	cm ³ /10min	ISO 1133
MVR test temperature	190	°C	ISO 1133
MVR test load	2.16	kg	ISO 1133
Mold shrinkage - parallel	1.8	%	ISO 294-4
Mold shrinkage - normal	1.6	%	ISO 294-4
Water absorption (23°C-sat)	0.8	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	2000	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	50	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	12	%	ISO 527-2/1A
Flexural modulus (23°C)	2000	MPa	ISO 178
Charpy impact strength @ 23°C	NB	kJ/m ²	ISO 179/1eU
Charpy impact strength @ -30°C	NB	kJ/m ²	ISO 179/1eU
Charpy notched impact strength @ 23°C	13.0	kJ/m ²	ISO 179/1eA
Charpy notched impact strength @ -30°C	8.0	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	84	°C	ISO 75-1/-2
DTUL @ 0.45 MPa	148	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	1.1	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	1.1	E-4/°C	ISO 11359-2

Test specimen production	Value	Unit	Test Standard
Processing conditions acc. ISO	9988-2	-	Internal

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Typical injection moulding processing conditions



Pre Drying:

Drying is not normally required. If material has contacted moisture through improper storage and handling or through regrind use, dry to prevent splay and odor problems.

Drying time: 3 h

Drying temperature: 80 - 100 °C

Temperature:

	$\varnothing_{\text{Mold}}$	$\varnothing_{\text{Melt}}$	$\varnothing_{\text{Nozzle}}$	$\varnothing_{\text{Zone4}}$	$\varnothing_{\text{Zone3}}$	$\varnothing_{\text{Zone2}}$	$\varnothing_{\text{Zone1}}$
min (°C)	60	180	180	180	180	180	170
max (°C)	70	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

Special Info:

Do not heat over 205 C (~400 F) to avoid burning and discoloring product.

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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.

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