

## HOSTAFORM® XT 90 | POM | Impact Modified

### Description

Preliminary Data Sheet

Hostaform® acetal copolymer grade XT 90 is highly impact modified grade for very demanding applications. Hostaform® XT 90 provides exceptional impact strength and flexibility over standard impact modified acetal grades.

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

Physical properties	Value	Unit	Test Standard
Density	<b>1320</b>	kg/m <sup>3</sup>	ISO 1183
Melt volume rate (MVR)	<b>2</b>	cm <sup>3</sup> /10min	ISO 1133
MVR test temperature	<b>190</b>	°C	ISO 1133
MVR test load	<b>2.16</b>	kg	ISO 1133
Mold shrinkage - parallel	<b>1.2</b>	%	ISO 294-4
Mold shrinkage - normal	<b>1.1</b>	%	ISO 294-4
Water absorption (23°C-sat)	<b>0.8</b>	%	ISO 62

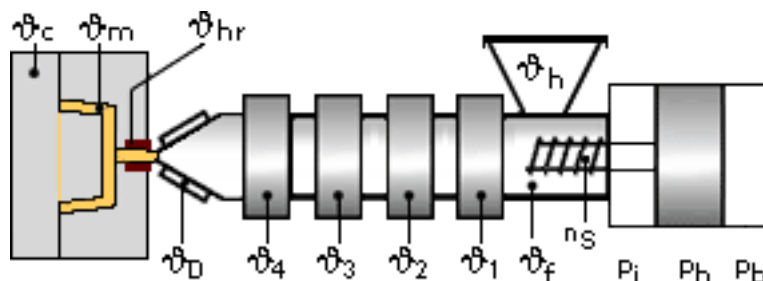
Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	<b>950</b>	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	<b>30</b>	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	<b>30</b>	%	ISO 527-2/1A
Flexural modulus (23°C)	<b>950</b>	MPa	ISO 178
Charpy impact strength @ 23°C	<b>NB</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength @ -30°C	<b>NB</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength @ 23°C	<b>100.0</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength @ -30°C	<b>15.0</b>	kJ/m <sup>2</sup>	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	<b>166</b>	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	<b>60</b>	°C	ISO 75-1/-2
DTUL @ 0.45 MPa	<b>115</b>	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	<b>1</b>	E-4/°C	ISO 11359-2
Coeff.of linear therm. expansion (normal)	<b>1.2</b>	E-4/°C	ISO 11359-2

Test specimen production	Value	Unit	Test Standard
Processing conditions acc. ISO	<b>9988-2</b>	-	Internal

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### Typical injection moulding processing conditions



#### Pre Drying:

Drying is suggested specially if material has come in contact with moisture through storage, handling or 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)	80	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.

### Contact Information

#### Americas

Ticona North American Headquarters  
Product Information Service  
8040 Dixie Highway  
Florence, KY 41042  
USA  
Tel.: +1-800-833-4882  
Tel.: +1-859-372-3244  
email: [prodinfo@ticona.com](mailto:prodinfo@ticona.com)  
Ticona on the web: [www.ticona.com](http://www.ticona.com)

#### Europe

Ticona GmbH  
Information Service  
Tel.: +49 (0) 180-5842662 (Germany)  
+49 (0) 69-30516299 (Europe)  
Fax: +49 (0) 180-2021202 (Germany & Europe)  
email: [infoservice@ticona.de](mailto:infoservice@ticona.de)  
Internet: [www.ticona.com](http://www.ticona.com)

## HOSTAFORM® XT 90 | POM | Impact Modified

Customer Service

Tel.: +1-800-526-4960

Tel.: +1-859-372-3214

Fax: +1-859-372-3125

### 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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