

## HOSTAFORM® CP15X | POM | Unfilled

### Description

#### Preliminary Data Sheet

Hostaform® acetal copolymer grade CP15X is a creep resistant, high viscosity polymer providing excellent performance in general purpose injection molding. This grade provides overall excellent performance in applications requiring high stiffness over time.

Physical properties	Value	Unit	Test Standard
Density	<b>1410</b>	kg/m <sup>3</sup>	ISO 1183
Melt volume rate (MVR)	<b>1.7</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>2.1</b>	%	ISO 294-4
Mold shrinkage - normal	<b>2.0</b>	%	ISO 294-4
Water absorption (23°C-sat)	<b>0.75</b>	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	<b>2700</b>	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	<b>66</b>	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	<b>12</b>	%	ISO 527-2/1A
Nominal strain at break (50mm/min)	<b>40</b>	%	ISO 527-2/1A
Flexural modulus (23°C)	<b>2450</b>	MPa	ISO 178

Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	<b>167</b>	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	<b>92</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</b>	E-4/°C	ISO 11359-2

Electrical properties	Value	Unit	Test Standard
Volume resistivity	<b>1E12</b>	Ohm*m	IEC 60093
Surface resistivity	<b>1E14</b>	Ohm	IEC 60093

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 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:

	$\varnothing_{\text{Manifold}}$	$\varnothing_{\text{Mold}}$	$\varnothing_{\text{Melt}}$	$\varnothing_{\text{Nozzle}}$	$\varnothing_{\text{Zone4}}$	$\varnothing_{\text{Zone3}}$	$\varnothing_{\text{Zone2}}$	$\varnothing_{\text{Zone1}}$
min (°C)	195	90	200	195	195	190	190	180
max (°C)	215	120	215	215	215	210	210	200

#### Pressure:

	Inj press	Hold press	Back pressure
min (bar)	900	900	0
max (bar)	1400	1400	5

#### Speed:

**Injection speed: slow**

### 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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### 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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