Ticona
Performance Driven Solutions™

HOSTAFORM® S 9243 XAP² ™ LS | POM | Impact Modified

Description

POM copolymer, modified

Injection molding type, elastomer-containing; with higher impact strength and slightly lower hardness, rigidity and chemical resistance than the basic type HOSTAFORM C 9021
Reduced emission grade, Emission according to VDA 275 < 5 mg/kg
good weld strength.

Burning rate according to FMVSS 302 < 100 mm/min (1 mm thickness)

Preliminary Datasheet for natural and colored grades

Physical properties	Value	Unit	Test Standard
Density	**1330**	kg/m³	ISO 1183
Melt volume rate (MVR)	**4**	cm³/10min	ISO 1133
MVR test temperature	**190**	°C	ISO 1133
MVR test load	**2.16**	kg	ISO 1133
Mold shrinkage - parallel	**1.9**	%	ISO 294-4
Mold shrinkage - normal	**1.8**	%	ISO 294-4
Water absorption (23°C-sat)	**1**	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	**1950**	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	**44**	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	**9**	%	ISO 527-2/1A
Nominal strain at break (50mm/min)	**40**	%	ISO 527-2/1A
Tensile creep modulus (1h)	**1700**	MPa	ISO 899-1
Tensile creep modulus (1000h)	**950**	MPa	ISO 899-1
Flexural modulus (23°C)	**1850**	MPa	ISO 178
Charpy impact strength @ 23°C	**NB**	kJ/m²	ISO 179/1eU
Charpy impact strength @ -30°C	**200P**	kJ/m²	ISO 179/1eU
Charpy notched impact strength @ 23°C	**15.0**	kJ/m²	ISO 179/1eA
Charpy notched impact strength @ -30°C	**9.0**	kJ/m²	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	**75**	°C	ISO 75-1/-2
Coeff.of linear therm. expansion (parallel)	**1.2**	E-4/°C	ISO 11359-2

Electrical properties	Value	Unit	Test Standard
Relative permittivity - 100 Hz	**3.8**	-	IEC 60250
Relative permittivity - 1 MHz	**3.8**	-	IEC 60250
Dissipation factor - 100 Hz	**30**	E-4	IEC 60250
Dissipation factor - 1 MHz	**60**	E-4	IEC 60250
Volume resistivity	**1E11**	Ohm*m	IEC 60093
Surface resistivity	**1E13**	Ohm	IEC 60093
Comparative tracking index CTI	**600**	-	IEC 60112

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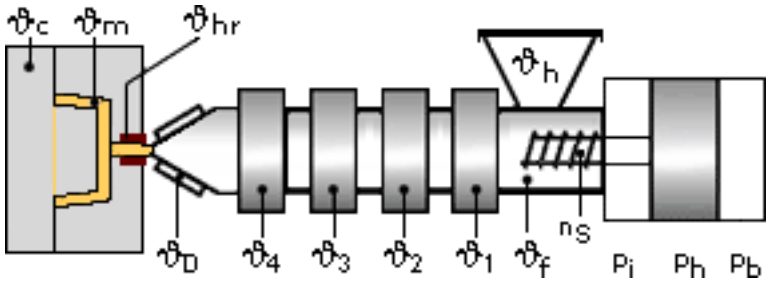
Test specimen production	Value	Unit	Test Standard
Processing conditions acc. ISO	**9988-2**	-	Internal

Typical injection moulding processing conditions



Pre Drying:

Necessary low maximum residual moisture content: 0.15%

It is normally not necessary to dry HOSTAFORM. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required. A circulating air drying cabinet can be used for this purpose if the granul

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

Drying time: 3 - 4 h

Drying temperature: 100 - 120 °C

Temperature:

	ϑManifold	ϑMold	ϑMelt	ϑNozzle	ϑZone4	ϑZone3	ϑZone2	ϑZone1	ϑFeed	ϑHopper
min (°C)	190	60	190	190	190	190	180	170	60	20
max (°C)	200	80	200	200	200	200	190	180	80	30

Pressure:

	Inj press	Hold press	Back pressure
min (bar)	600	600	0
max (bar)	1200	1200	20

Speed:

Injection speed: slow-medium

Screw speed

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

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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
Ticona on the web: www.ticona.com

Customer Service
Tel.: +1-800-526-4960
Tel.: +1-859-372-3214
Fax: +1-859-372-3125

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
Internet: www.ticona.com

General Disclaimer

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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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