HOSTAFORM® C 9021 XAP®2 - POM

Description

POM copolymer Standard injection molding grade with reduced emissions especially for automotive interior application. Burning rate according to FMVSS 302 < 100 mm/min (1 mm thickness) Emission according to VDA 275 < 2 mg/kg (natural grades) Emission according to VDA 275 < 5 mg/kg (colored grades)

Physical properties	Value	Unit	Test Standard
Density	**1410**	kg/m³	ISO 1183
Melt volume rate, MVR	**8**	cm³/10min	ISO 1133
MVR temperature	**190**	°C	ISO 1133
MVR load	**2.16**	kg	ISO 1133
Molding shrinkage, parallel	**2.0**	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.9**	%	ISO 294-4, 2577
Water absorption, 23°C-sat	**0.65**	%	ISO 62
Humidity absorption, 23°C/50%RH	**0.2**	%	ISO 62

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	**2700**	MPa	ISO 527-2/1A
Tensile stress at yield, 50mm/min	**64**	MPa	ISO 527-2/1A
Tensile strain at yield, 50mm/min	**10**	%	ISO 527-2/1A
Tensile nominal strain at break, 50mm/min	**35**	%	ISO 527-2/1A
Tensile creep modulus, 1h	**2400**	MPa	ISO 899-1
Tensile creep modulus, 1000h	**1200**	MPa	ISO 899-1
Flexural modulus, 23°C	**2600**	MPa	ISO 178
Charpy impact strength, 23°C	**220**[P]	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	**220**	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	**6.5**	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	**6**	kJ/m²	ISO 179/1eA

P: Partial Break

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	**166**	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	**104**	°C	ISO 75-1, -2
DTUL at 0.45 MPa	**157**	°C	ISO 75-1, -2
Vicat softening temperature, 50°C/h 50N	**150**	°C	ISO 306
Coeff. of linear therm expansion, parallel	**1.2**	E-4/°C	ISO 11359-2
Coeff. of linear therm expansion, normal	**1.2**	E-4/°C	ISO 11359-2

Electrical properties	Value	Unit	Test Standard
Dielectric constant (Dk), 100Hz	**4**	-	IEC 60250
Dielectric constant (Dk), 1MHz	**4**	-	IEC 60250
Dissipation factor, 100Hz	**20**	E-4	IEC 60250
Dissipation factor, 1MHz	**50**	E-4	IEC 60250
Volume resistivity	**1E12**	Ohm*m	IEC 60093
Surface resistivity	**1E14**	Ohm	IEC 60093
Electric strength	**35**	kV/mm	IEC 60243-1
Comparative tracking index	**600**	-	IEC 60112

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	**0.15**	%	-
Drying time	**3 - 4**	h	-
Drying temperature	**100 - 120**	°C	-
Temperature	**Value**	**Unit**	**Test Standard**
Hopper temperature	**20 - 30**	°C	-
Feeding zone temperature	**60 - 80**	°C	-

Zone1 temperature	**170 - 175**	°C	-
Zone2 temperature	**180 - 185**	°C	-
Zone3 temperature	**180 - 195**	°C	-
Zone4 temperature	**180 - 200**	°C	-
Nozzle temperature	**190 - 200**	°C	-
Melt temperature	**180 - 200**	°C	-
Mold temperature	**80 - 120**	°C	-
Hot runner temperature	**190 - 200**	°C	-
Pressure	**Value**	**Unit**	**Test Standard**
Back pressure max.	**40**	bar	-
Speed	**Value**	**Unit**	**Test Standard**
Injection speed	**slow-medium**	-	-
Screw Speed	**Value**	**Unit**	**Test Standard**
Screw speed diameter, 25mm	**150**	RPM	-
Screw speed diameter, 40mm	**100**	RPM	-
Screw speed diameter, 55mm	**70**	RPM	-

Other text information

Pre-drying

recommended

Injection molding

Standard injection moulding machines with three phase (15 to 25 D)
plasticating screws will fit.

Melt temperature 180-190 °C
Mould temperature 60-120 °C

Characteristics

Product Categories	Delivery Form
Unfilled	Pellets
Processing	**Additives**
Injection molding	Release agent

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