

# Celanese Hostaform<sup>®</sup> C 9021 M XAP2

Description: Injection molding type, modified with molybdenum disulphide; good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance; high resistance to thermal and oxidative degradation. Reduced emission grade. Emissions according to VDA 275<5 mg/kg

Physical Properties	Metric	English	Comments
Density	1.42 g/cc	0.0513 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.75 %	0.75 %	ISO 62
Melt Flow	8.5 g/10 min @Load 2.16 kg, Temperature 190 °C	8.5 g/10 min @Load 4.76 lb, Temperature 374 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	64.0 MPa	9280 psi	50 mm/min; ISO 527-2/1A
Elongation at Break	20 %	20 %	50 mm/min; ISO 527-2/1A
Elongation at Yield	9.0 %	9.0 %	50 mm/min; ISO 527-2/1A
Tensile Modulus	2.65 GPa	384 ksi	1 mm/min; ISO 527-2/1A
Flexural Modulus	2.60 GPa	377 ksi	ISO 178
Charpy Impact Unnotched	12.0 J/cm <sup>2</sup> @Temperature 23.0 °C	57.1 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	12.0 J/cm <sup>2</sup> @Temperature -30.0 °C	57.1 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched	0.600 J/cm <sup>2</sup> @Temperature 23.0 °C	2.86 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 179/1eA
Charpy Impact, Notched	0.600 J/cm <sup>2</sup> @Temperature -30.0 °C	2.86 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	ISO 179/1eA
Tensile Creep Modulus, 1 hour	2300 MPa	334000 psi	ISO 899-1
Tensile Creep Modulus, 1000 hours	1100 MPa	160000 psi	ISO 899-1

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	IEC 60093
Surface Resistance	1.00e+14 ohm	1.00e+14 ohm	IEC 60093
Dielectric Constant	4.2 @Frequency 100 Hz	4.2 @Frequency 100 Hz	IEC 60250
Dielectric Constant	4.2 @Frequency 1e+6 Hz	4.2 @Frequency 1e+6 Hz	IEC 60250
Dielectric Strength	35.0 kV/mm	889 kV/in	IEC 60243-1
Dissipation Factor	0.0025 @Frequency 100 Hz	0.0025 @Frequency 100 Hz	IEC 60250
Dissipation Factor	0.0080 @Frequency 1e+6 Hz	0.0080 @Frequency 1e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	1.10 µm/m-°C	0.611 µin/in-°F	ISO 11359-2
Melting Point	166 °C	331 °F	10°C/min; ISO 11357-1,-2,-3
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	ISO 75-1/-2

Processing Properties	Metric	English	Comments
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Feed Temperature	60.0 - 80.0 °C	140 - 176 °F
Nozzle Temperature	190 - 210 °C	374 - 410 °F
Zone 1	170 - 180 °C	338 - 356 °F
Zone 2	180 - 190 °C	356 - 374 °F
Zone 3	190 - 200 °C	374 - 392 °F
Zone 4	190 - 210 °C	374 - 410 °F
Melt Temperature	190 - 210 °C	374 - 410 °F
Mold Temperature	80.0 - 120 °C	176 - 248 °F
Drying Temperature	100 - 120 °C	212 - 248 °F
Dry Time	3 - 4 hour	3 - 4 hour
Moisture Content	<= 0.15 %	<= 0.15 %
Injection Pressure	60.0 - 120 MPa	8700 - 17400 psi
Hold Pressure	60.0 - 120 MPa	8700 - 17400 psi
Back Pressure	0.000 - 2.00 MPa	0.000 - 290 psi
Screw Speed	70 rpm	70 rpm
	@Diameter 55.0 mm	@Diameter 2.17 in
	100 rpm	100 rpm
	@Diameter 40.0 mm	@Diameter 1.57 in
150 rpm	150 rpm	150 rpm
	@Diameter 25.0 mm	@Diameter 0.984 in

#### Descriptive Properties

Hopper	20-30°C
Manifold	190-210°C