

CELCON® M90 - POM

Product Texts

Celcon® acetal copolymer grade M90 is a medium viscosity polymer providing optimum performance in general purpose injection molding and extrusion of thin walled tubing and thin gauge film. This grade provides overall excellent performance in many applications. Chemical abbreviation according to ISO 1043-1: POM Please also see Hostaform® C 9021.

Rheological properties	Value	Unit	Test Standard
Melt volume-flow rate, MVR	8	cm ³ /10min	ISO 1133
Temperature	190	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Molding shrinkage, normal	1.9	%	ISO 294-4, 2577
Mechanical properties	Value	Unit	Test Standard
Tensile modulus	2760	MPa	ISO 527-1/-2
Yield stress	65	MPa	ISO 527-1/-2
Yield strain	10	%	ISO 527-1/-2
Tensile creep modulus, 1h	2450	MPa	ISO 899-1
Tensile creep modulus, 1000h	1350	MPa	ISO 899-1
Charpy impact strength, +23°C	188	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	181	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	6	kJ/m ²	ISO 179/1eA
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	165	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	101	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	158	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	120	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	120	E-6/K	ISO 11359-1/-2
Oxygen index	14.9	%	ISO 4589-1/-2
Electrical properties	Value	Unit	Test Standard
Volume resistivity	8E12	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Other properties	Value	Unit	Test Standard
Water absorption	0.75	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1410	kg/m ³	ISO 1183