

Celanese Celcon[®] M90

Celanese Celcon[®] M90, a POM copolymer, offers good to excellent corrosion resistance, excellent cold workability and good hot formability. It's fabricated via common methods and used in diverse applications like springs and navigational instruments, with a proprietary mill treatment for specific tensile properties.

Physical property		Standard	Value	Unit
Density		ISO 1183	1.41	g/cm ³
Shrinkage	Flow	ISO 294	2	%
Shrinkage	xFlow	ISO 294	1.9	%
Water Absorption	23°C 24hr	ISO 62	0.75	%
Water Absorption	23°C 50RH	ISO 62	0.2	%
Melt Index	190°C 2.16kg	ISO 1133	8	cm ³ /10min
Mechanical behavior		Standard	Value	Unit
Tensile Modulus	23°C	ISO 527	2760	MPa
Tensile Strength	23°C	ISO 527	66	MPa
Elongation	23°C	ISO 527	10	%
Tensile Creep Modulus	1 hr	ISO 899	2450	MPa
Tensile Creep Modulus	1000hr	ISO 899	1350	MPa
Flexural Modulus	23°C	ISO 178	2550	MPa
Izod Notch Impact	23°C	ISO 180	5.7	kJ/m ²
Charpy Notch Impact	23°C	ISO 179	6	kJ/m ²
Charpy Notch Impact	-30°C	ISO 179	6	kJ/m ²
Charpy Un-notch Impact	23°C	ISO 179	190	kJ/m ²
Charpy Un-notch Impact	-30°C	ISO 179	180	kJ/m ²
Thermal		Standard	Value	Unit
HDT	Unannealed 0.45MPa	ISO 75	158	°C
HDT	Unannealed 1.8MPa	ISO 75	101	°C
Melting Temperature		ISO 11357	165	°C
CLE	Flow	ISO 11359	1.2E-4	cm/cm/°C
CLE	xFlow	ISO 11359	1.2E-4	cm/cm/°C
Electrical properties		Standard	Value	Unit
Volume Resistivity		IEC 60093	8E+14	Ω.cm
Surface Resistivity		IEC 60093	3E+16	
Dielectric Strength		IEC 60243	26	KV/mm
Flammability		Standard	Value	Unit
Flame Rating	All Color 0.71mm	UL94	HB	
Flame Rating	All Color 1.5mm	UL94	HB	
Flame Rating	All Color 3.0mm	UL94	HB	
Flame Rating	All Color 6.0mm	UL94	HB	