

Ticona Product Data Datasheet

Ticona
Preliminary

CELCON CE66 | Unfilled
General Purpose Acetal Copolymer

Description

Celcon acetal copolymer grade CE66 is a medium viscosity polymer providing good 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

UL94 Flammability HB

Physical Properties

	Value	Unit	Test Standard
Density	1410	kg/m ³	ISO 1183
Melt volume rate (MVR)	8.0	cm ³ /10min	ISO 1133
Mold shrinkage - parallel	2	%	ISO 294-4
Mold shrinkage - normal	1.9	%	ISO 294-4
Water absorption (23°C-sat)	0.75	%	ISO 62
Humidity absorption (23°C/50%RH)	0.2	%	ISO 62

Mechanical Properties

	Value	Unit	Test Standard
Tensile modulus (1mm/min)	2700	MPa	ISO 527-2/1A
Tensile stress at yield (50mm/min)	62	MPa	ISO 527-2/1A
Tensile strain at yield (50mm/min)	11.0	%	ISO 527-2/1A
Charpy notched impact strength @ 23°C	6.0	KJ/m ²	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	100	°C	ISO 75-1, -2
DTUL @ 0.45 MPa	155	°C	ISO 75-1, -2

Electrical Properties

	Value	Unit	Test Standard
Volume resistivity	1E12	ohm-m	IEC 60093
Surface resistivity	1E15	ohm	IEC 60093

Processing Properties

	Value	Unit	Test Standard
Melt temperature	360-390 (182-199)	°F (°C)	Internal
Mold temperature	170-200 (77-93)	°F (°C)	Internal
Injection pressure	11,000 - 16,000	psi	Internal
Drying	80 C (180 F) for 3 hours		Internal
Regrind	25%	%	Internal