

TARNOFORM® 500 CE - POM

Restricted Grade. Please contact your Celanese representative for further information.

Description

Tarnoform® 500 CE is a very easy flowing Injection molding type with high rigidity and hardness. This grade provides overall excellent performance in many applications. Chemical abbreviation according to ISO 1043-1 >POM<
 Complies with EU 10/2011 and FDA CFR21 food contact regulations.

Physical properties	Value	Unit	Test Standard
Density	1410	kg/m ³	ISO 1183
Melt volume rate, MVR	24	cm ³ /10min	ISO 1133
MVR temperature	190	°C	ISO 1133
MVR load	2,16	kg	ISO 1133
Molding shrinkage, parallel (flow)	1,9	%	ISO 294-4, 2577
Molding shrinkage, transverse normal	1,8	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	2800	MPa	ISO 527-2/1A
Tensile stress at yield, 50mm/min	64	MPa	ISO 527-2/1A
Tensile strain at yield, 50mm/min	7,5	%	ISO 527-2/1A
Flexural modulus, 23°C	2550	MPa	ISO 178
Charpy impact strength, 23°C	140	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	5,5	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	4,5	kJ/m ²	ISO 179/1eA
Ball indentation hardness, 30s	147	MPa	ISO 2039-1

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	166	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	106	°C	ISO 75-1, -2
Coeff. of linear therm expansion, parallel	1,1	E-4/°C	ISO 11359-2

Electrical properties	Value	Unit	Test Standard
Volume resistivity	1E12	Ohm*m	IEC 60093
Surface resistivity	1E14	Ohm	IEC 60093
Electric strength	25	kV/mm	IEC 60243-1

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Drying time	3 - 4	h	-
Drying temperature	100 - 120	°C	-
Temperature	Value	Unit	Test Standard
Zone1 temperature	170 - 180	°C	-
Zone2 temperature	180 - 190	°C	-
Zone3 temperature	190 - 200	°C	-
Zone4 temperature	190 - 210	°C	-
Nozzle temperature	190 - 210	°C	-
Melt temperature	190 - 210	°C	-
Mold temperature	80 - 120	°C	-
Hot runner temperature	190 - 210	°C	-
Pressure	Value	Unit	Test Standard
Back pressure max.	40	bar	-
Speed	Value	Unit	Test Standard
Injection speed	slow-medium	-	-

Other text information

Pre-drying

Drying is not normally required. If material has come in contact with moisture through improper storage or handling or through regrind use, drying may be necessary to prevent splay and odor problems.

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Longer pre-drying times/storage

The product can then be stored in standard conditions until processed.

Injection molding

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

Characteristics

Product Categories

Unfilled

Delivery Form

Pellets

Processing

Injection molding

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General Disclaimer

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