

Chemical Designation

POM-C (Polyacetal (Copolymer))

Colour

blue

Density

1.6 g/cm³

Fillers

detectable filler

Main features

- metal detectable
- x-ray detectable
- Explanation of food contact according to FDA and EU 10/2011 on request
- good chemical resistance
- good slide and wear properties
- for injection moulding

Target Industries

- food technology

Mechanical properties	parameter	value	unit	norm	comment
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Tensile strength		50	MPa	DIN EN ISO 527-1	
Modulus of elasticity (tensile test)		3200	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)		26	%	DIN EN ISO 527-1	
Impact strength (Charpy)		81	kJ/m ²	DIN EN ISO 179-1eU	

Thermal properties	parameter	value	unit	norm	comment
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Glass transition temperature		-65	°C	-	1)
Melting temperature		166	°C	-	2)
Service temperature	short term	140	°C	-	3)
Service temperature	long term	100	°C	-	4)

Electrical properties	parameter	value	unit	norm	comment
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surface resistivity		10 ¹²	Ω	DIN EN 61340-2-3	
volume resistivity		10 ¹²	Ω*cm	DIN EN 61340-2-3	

Other properties	parameter	value	unit	norm	comment
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Water absorption		0,06	%	DIN EN ISO 62	1)
Detectability	4 x 4 x 4 mm	2,5	mm Al	-	2)
Detectability	4 x 4 x 4 mm	2,8	mm Al	-	3)
Molding shrinkage	longitudinal	2,9	%	DIN EN ISO 294-4	
Molding shrinkage	transverse	2,3	%	DIN EN ISO 294-4	

Processing parameter	parameter	value	unit	norm	comment
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processing temperatures		180 - 225	°C	-	
Mould temperature		60 - 120	°C	-	

→ This material can be processed as a thermoplastic taking the normal technical provisions into account. The above mentioned information refers exclusively to the injection moulding process.

→ Back pressure and injection rate should be adjusted to the component geometry accordingly. The optimum processing temperature depends upon the respective geometry of the moulded part and can be different from machine to machine.

Predrying	parameter	value	unit	norm	comment
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Permissible residual moisture content		< 0,1	%	-	
Drying temperature		100 - 110	°C	-	
Drying time		3 - 4	h	-	

