FAÇADE CREATIONS

Technical Specification Sheets

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Chemical Designation
PEEK (Polyetheretherketone)

Colour
blue

Density
1.48 g/cm^3

Fillers
detectable filler

Main features
- detectable via metal detector
- x-ray detectable
- Explanation of food contact according to FDA and EU 10/2011 on request
- good chemical resistance
- high creep resistance
- inherent flame retardant
- good heat deflection temperature
- hydrolysis and superheated steam resistant

Target Industries
- food technology

Mechanical properties	parameter	value	unit	norm	comment
Tensile strength		97	MPa	DIN EN ISO 527-1	
Modulus of elasticity (tensile test)		4200	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)		18	%	DIN EN ISO 527-1	
Impact strength (Charpy)		n.B.	kJ/m^2	DIN EN ISO 179-1eU	
Notched impact strength (Charpy)		6	kJ/m^2	DIN EN ISO 179-1eA	

Thermal properties	parameter	value	unit	norm		comment
Glass transition temperature		143	°C	-	1)	(1) literature value (2) literature value (3) literature value (4) literature value
Melting temperature		343	°C	-	2)	
Service temperature	short term	300	°C	-	3)	
Service temperature	long term	260	°C	-	4)	

Electrical properties	parameter	value	unit	norm	comment
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
Detectability	4 x 4 x 4 mm	2,2	mm Al	-	1)	(1) metal detectable (2) 23 °C / 50 % relative humidity up to saturation (3) x-ray detectable
Water absorption		0,03	%	DIN EN ISO 62	2)	
Detectability	4 x 4 x 4 mm	2,5	mm Al	-	3)	
Molding shrinkage	longitudinal	1,8	%	DIN EN ISO 294-4		
Molding shrinkage	transverse	1,8	%	DIN EN ISO 294-4		

Processing parameter	parameter	value	unit	norm	comment
processing temperatures		360 - 410	°C	-	
Mould temperature		170 - 210	°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
Permissible residual moisture content		0,02	%	-	
Drying temperature		150 - 160	°C	-	
Drying time		2 - 4	h	-	