Technical Specification Sheets

T: +44 (0) 116 289 3343 E: info@facadecreations.co.uk W: www.facadecreations.co.uk
Registered Office Address: 124 City Road, London, England, EC1V 2NX. Registered in England, Company Number: 16267073

Chemical Designation
PA 66 (Polyamide 66)

Colour
black

Density
1.27 g/cm^3

Fillers
carbon fibres

Main features
- very high stiffness
- high strength
- good wear properties
- good heat deflection temperature
- resistant to many oils, greases and fuels
- good weldable and bondable
- low viscosity
- for injection moulding

Target Industries
- automotive industry
- mechanical engineering
- business machines
- precision engineering

Mechanical properties	parameter	value	unit	norm		comment
Tensile strength		267	MPa	DIN EN ISO 527-1		
Modulus of elasticity (tensile test)		21000	MPa	DIN EN ISO 527-1		
Elongation at break (tensile test)		2,0	%	DIN EN ISO 527-1		
Impact strength (Charpy)		54	kJ/m^2	DIN EN ISO 179-1eU		

Thermal properties	parameter	value	unit	norm		comment
Glass transition temperature		5 / 72	°C	-	1)	(1) moist/dry - literature value (2) literature value (3) literature value (4) literature value
Melting temperature		260	°C	-	2)	
Heat distortion temperature		257	°C	ISO-R 75 Method A		
Service temperature	short term	170	°C	-	3)	
Service temperature	long term	110	°C	-	4)	

Electrical properties	parameter	value	unit	norm	comment
volume resistivity		10^{-1}	Ω*cm	DIN EN ISO 3915	

Other properties	parameter	value	unit	norm		comment
Water absorption		< 0,1	%	DIN EN ISO 62	1)	(1) 23 °C / 50 % relative humidity up to saturation
Molding shrinkage	longitudinal	0,2	%	DIN EN ISO 294-4		
Molding shrinkage	transverse	0,7	%	DIN EN ISO 294-4		

Processing parameter	parameter	value	unit	norm	comment
processing temperatures		270 - 310	°C	-	
Mould temperature		80 - 110	°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.
- Processing should be carried out as gently as possible, in order to maintain the maximum fibre length in the component. 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		< 0,1	%	-	
Drying temperature		80 - 120	°C	-	
Drying time		4 - 8	h	-	