TECACOMP PA66 CF20 black 1014850 - Compounds

Chemical Designation
PA 66 (Polyamide 66)

Colour
black

Density
1.24 g/cm^3

Fillers
carbon fibres

Main features
- high stiffness
- electrically conductive
- good wear properties
- good heat deflection temperature
- resistant to many oils, greases and fuels
- good weldable and bondable
- low viscosity

Mechanical properties	parameter	value	unit	norm		comment
Tensile strength		235	MPa	DIN EN ISO 527-1		
Modulus of elasticity (tensile test)		15800	MPa	DIN EN ISO 527-1		
Elongation at break (tensile test)		2,6	%	DIN EN ISO 527-1		
Impact strength (Charpy)		44	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		258	°C	-		
Service temperature	short term	170	°C	-	3)	
Service temperature	long term	110	°C	-	4)	
Electrical properties	**parameter**	**value**	**unit**	**norm**		**comment**
surface resistivity		< 10^4	Ω	DIN EN 61340-2-3		
volume resistivity		< 10^2	Ω*m	DIN EN 61340-2-3		
Other properties	**parameter**	**value**	**unit**	**norm**		**comment**
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	-	

- To achieve optimum mechanical properties, it is recommended to pre-dry the material with the above mentioned parameters.
- Information on storage and shelf life: The granules must be stored in dry, normally tempered rooms and in closed containers. For moisture-sensitive materials, the granules must be sealed airtight. Protection against direct sunlight must be guaranteed. The granules are usually subject to the requirements of no shelf life limitation. Shelf Life may be limited by some additives.

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