












Material Data Sheet








PA66 GF30 black

Chemical Designation : Polyamide 66
 DIN-Abbreviation: PA 66 GF 30
 Colours, fillers: black, 30% glass fibre

Main features

-  very rigid
 -  resistant to many oils, greases, diesels and petrol
 -  very abrasion resistant
 -  easily welded
 -  not electrically insulating
 -  easily machined
 -  very strong
 -  high dimensional stability
 -  good heat deformation resistance
 -  UV and weather resistant
 -  easily bonded
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Preferred Fields

-  mechanical engineering
 -  transport and conveyor technology
 -  textile machinery
 -  precision engineering
 -  automotive engineering
 -  gears, couplings and engine construction
 -  packaging and paper processing machinery
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Applications

sealings, fixing parts, spacers

Properties

Material Data Sheet	PA66 GF30 black		
Mechanical	dry / moist		standard
Tensile strength at break	110	MPa	DIN EN ISO 527
Elongation at break	6	%	DIN EN ISO 527
Modulus of elasticity in tension	7000	MPa	DIN EN ISO 527
Hardness	200		ISO 2039/1 (Kugeldruck-Härte)
Impact strength 23° C (Charpy)	70	KJ/m ²	DIN EN ISO 179 (Charpy)
Time yield limit for 1% elongation after 1000 h	40	MPa	
Co-efficient of friction p = 0,05 N/mm ² v=0,6 m/s on steel, hardened and ground	0,45-0,50 / 0,5		

Thermal	dry / moist		standard
Glass transition temperature	72 / 5	°C	DIN 53 765
Heat distortion temperature HDT, Method A	250	°C	ISO-R 75 Verfahren A (DIN 53 461)
Heat distortion temperature HDT, Method B	250	°C	ISO-R 75 Verfahren B (DIN 53 461)
Max. service temperature			
short term	170	°C	
long term	110	°C	
Thermal conductivity (23° C)	0,27	W/(K·m)	
Specific heat (23° C)	1,5	J/g.K	
Coefficient of thermal expansion (23-55°C)	2-3	10 ⁻⁵ 1/K	DIN 53 752

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Electrical	dry / moist		standard
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Miscellaneous	dry / moist		standard
Density	1,35	g/cm ³	DIN 53 479
Moisture absorption (23°C/50RH)	1,5	%	DIN EN ISO 62
Water absorption to equilibrium	5,5	%	DIN EN ISO 62
Flammability acc. to UL standard 94	HB		
Resistance to hot water, washing soda:	(+)		
Resistance to weathering	+		

(1) Testing of semi-finished products

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