

# TECAMID 66 GF 30

Chemical Designation :	Polyamide 66
DIN–Abbreviation:	PA 66 GF 30
Colours, fillers:	beige, 30% glass fibres

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## Main features

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|---------------------------------------|---------------------------------|
| high thermal and mechanical capacity  | very rigid                      |
| very good heat deformation resistance | creep resistant                 |
| resistant to numerous detergents      | easily machined                 |
| electrically insulating               | very high dimensional stability |
| little abrasion                       | –                               |
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## Preferred Fields

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| mechanical engineering                   | automotive engineering                   |
| transport and conveyor technology        | electrical engineering                   |
| precision engineering                    | textile machinery                        |
| packaging and paper processing machinery | packaging and paper processing machinery |
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## Applications

sealings, fixing parts, spacers

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## Properties

<b>Mechanical</b>	<b>dry / moist</b>	<b>standard</b>
Tensile strength at yield		MPa
Elongation at yield		%
Tensile strength at break	160 / 130	MPa      DIN EN ISO 527

Elongation at break	3 / 5	%	DIN EN ISO 527
Modulus of elasticity in tension	8000 / 7500	MPa	DIN EN ISO 527
Modulus of elasticity after flexural test		MPa	
Hardness	175		ISO 2039/1 (Kugeldruck-Härte, 961N)
Impact strength 23° C (Charpy)	70	KJ/m <sup>2</sup>	DIN EN ISO 179 (Charpy)
Creep rupture strength after 1000 h with static load		MPa	
Time yield limit for 1% elongation after 1000 h	40	MPa	
Co-efficient of friction p = 0,05 N/mm <sup>2</sup> v=0,6 m/s on steel, hardened and ground	0,45–0,5		
Wear p = 0,05 N/mm <sup>2</sup> v=0,6 m/s on steel, hardened and ground		µm/km	

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<b>Thermal</b>	<b>dry / moist</b>		<b>standard</b>
Crystalline melting point		°C	
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 <sup>-5</sup> 1/K	DIN 53 752

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## Properties

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<b>Electrical</b>	<b>dry / moist</b>		<b>standard</b>
Dielectric constant ( $10^6$ Hz)			
Dielectric loss factor ( $10^6$ Hz)			
Specific volume resistance	$8 \cdot 10^{13}$	$\Omega \cdot \text{cm}$	DIN IEC 60093
Surface resistance	$6 \cdot 10^{13}$	$\Omega$	DIN IEC 60093
Dielectric strength		kV/mm	
Resistance to tracking			

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<b>Miscellaneous</b>	<b>dry / moist</b>		<b>standard</b>
Density	1,35	$\text{g/cm}^3$	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		

### (1) Testing of semi-finished products

The above information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of chemical resistance, of certain properties and the suitability of our products and their applications. Our products are not destined for use in medical and dental implants. Existing commercial patents must be observed. Unless otherwise stated, these values represent averages taken from injection moulding samples, dry as moulded. We reserve the right to make technical alterations.

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