

TECAMID 66 GF35 black - Stock Shapes (rods, plates, tubes)

Chemical Designation

PA 66 (Polyamide 66)

Colour

black opaque

Density

1.4 g/cm³

Fillers

glass fibres

Data generated directly after machining
(standard climate Germany).

Main features

- very high stiffness
- resistant to many oils, greases and fuels
- good wear properties
- very high strength
- high dimensional stability
- good heat deflection temperature
- good weldable and bondable

Target Industries

- aircraft and aerospace technology
- mechanical engineering

Mechanical properties	parameter	value	unit	norm	comment
Tensile strength	50mm/min	98	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
Modulus of elasticity (tensile test)	1mm/min	5700	MPa	DIN EN ISO 527-2	1)
Elongation at yield (tensile test)	50mm/min	7	%	DIN EN ISO 527-2	
Elongation at break (tensile test)	50mm/min	11	%	DIN EN ISO 527-2	
Flexural strength		149	MPa	DIN EN ISO 178	
Modulus of elasticity (flexural test)		5100	MPa	DIN EN ISO 178	
Impact strength (Charpy)		80	kJ/m ²	DIN EN ISO 179-1eU	
Notched impact strength (Charpy)		5	kJ/m ²	DIN EN ISO 179-1eA	
Shore hardness	D	84		DIN EN ISO 868	
Thermal properties	parameter	value	unit	norm	comment
Glass transition temperature		48	°C	DIN EN ISO 11357	1)
Melting temperature		254	°C	DIN EN ISO 11357	
Service temperature	short term	170	°C		2)
Service temperature	long term	110	°C		
Electrical properties	parameter	value	unit	norm	comment
surface resistivity	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω	-	(1) Due to moisture uptake of the material the electrical insulation properties cannot be 100% guaranteed, despite single measurements suggesting otherwise.
volume resistivity	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω*cm	-	1)
Other properties	parameter	value	unit	norm	comment
Resistance to hot water/ bases		(+)		-	1)
Resistance to weathering		(+)		-	2)
Flammability (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	2)

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