

TECAMID® 66 GF30 - Stock Shapes

Chemical Designation

PA 66 (Polyamide 66)

Colour

grey-white

Density

1.34 g/cm³

Fillers

30% glass fibres

Main features

- very good mechanical strength
- high heat deflection temperature
- high stiffness
- high strength
- excellent wear properties
- high fatigue strength
- resistant to many solvents
- high creep resistance

Target Industries

- power engineering
- gear manufacturing
- automotive industry
- conveyor technology
- mechanical engineering
- construction industry
- others

Mechanical properties	condition	value	test method	comment
Modulus of elasticity (tensile test)	@ 73 °F	797,000 psi	ASTM D 638	(1) Data obtained from public source
Tensile strength at yield	@ 73 °F	13,000 psi	ASTM D 638	(2) Data obtained from public source
Tensile strength at break	@ 73 °F	13,000 psi	ASTM D 638	1)
Elongation at yield	@ 73 °F	8 %	ASTM D 638	2)
Elongation at break	@ 73 °F	14 %	ASTM D 638	
Flexural strength	@ 73 °F	19,575 psi	ASTM D 790	
Modulus of elasticity (flexural test)	@ 73 °F	681,000 psi	ASTM D 790	
Compression strength	@ 1% strain	3625 psi	ASTM D 695	
Compression strength	@ 10% strain	16300 psi	ASTM D 695	
Compression modulus		510,000 psi	ASTM D 695	
Impact strength (Izod)		1.8 ft-lbs/in	ASTM D 256	
Rockwell hardness	M Scale	88	ASTM D 785	
Thermal properties	condition	value	test method	comment
Melting temperature		499 °F	-	(1) Data obtained from public source
Service temperature	Intermittent	338 °F	-	(2) Data obtained from public source
Service temperature	Long Term	230 °F	-	
Thermal expansion (CLTE)		2.7*10 ⁻⁵ in/in/°F	ASTM D 696	
Specific heat		0.3 BTU/lb-F°	-	1)
Thermal conductivity		2.71 BTU-in/hr-ft ² -°F	-	2)
Electrical properties	condition	value	test method	comment
Specific surface resistance		1.0*10 ¹⁴ Ω/square	ASTM D 257	1)
Volume resistivity		1.0*10 ¹⁴ Ω*cm	-	2)
Other properties	condition	value	test method	comment
Moisture absorption	@ 24 hrs, 73 °F	0.25 %	ASTM D 570	(1) Data obtained from public source
Moisture absorption	@ saturation, 73 °F	0.30 %	ASTM D 570	
Flammability (UL94)		HB	-	1)

→ Resin specification: ASTM D6779-11 PA0110G30A00000 and ASTM D4066-01a (Reapproved 2008) PA0110G30A00000
 Shapes specification: ASTM D5989-11 S-PA0101G3054444444

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