

## TECAMID® 66 GF30 - Stock Shapes

### Chemical Designation

PA 66 (Polyamide 66)

### Colour

grey-white

### Density

1.34 g/cm<sup>3</sup>

### 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

<b>Mechanical properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>	<b>comment</b>
Modulus of elasticity (tensile test)	@ 73 °F	797,000	psi	ASTM D 638	(1) Data obtained from public source (2) Data obtained from public source
Tensile strength at yield	@ 73 °F	13,000	psi	ASTM D 638	
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	
<b>Thermal properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>	<b>comment</b>
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 <sup>-5</sup>	in/in/°F	ASTM D 696	
Specific heat		0.3	BTU/lb-F°	-	1)
Thermal conductivity		2.71	BTU-in/hr-ft <sup>2</sup> -°F	-	2)
<b>Electrical properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>	<b>comment</b>
Specific surface resistance		1.0*10 <sup>14</sup>	Ω/square	ASTM D 257	1) (1) Data obtained from public source
Volume resistivity		1.0*10 <sup>14</sup>	Ω*cm	-	2) (2) Data from public source
<b>Other properties</b>	<b>condition</b>	<b>value</b>		<b>test method</b>	<b>comment</b>
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-PA0101G305444440

Material properties and averages can vary from one manufacturer to another. These properties are given as reference without any obligation or liability on behalf of Precision Punch and Plastics.