

# TECAMID® 66 GF30 natural - Stock Shapes (rods, plates, tubes)

# **Chemical Designation**

PA 66 (Polyamide 66)

# Colour

grey-white

# Density

1.36 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

Mechanical properties	condition	value		test method		comment
Modulus of elasticity (tensile test)	@ 73 °F	800,000	psi	ASTM D 638		
Tensile strength at yield	@ 73 °F	13,500	psi	ASTM D 638		•
Elongation at break	@ 73 °F	10	%	ASTM D 638		•
Flexural strength	@ 73 °F	19,575	psi	ASTM D 790	·····	
Modulus of elasticity (flexural test)	@ 73 °F	700,000	psi	ASTMD790		
Compression strength	@ 73 °F, 10% strain	17,000	psi	ASTM D 695		
Compression strength	@ 73 °F, 1% strain	2,900	psi	ASTM D 695		
Compression modulus	@ 73 °F	380,000	psi	ASTM D 695		
Impact strength (Izod)		1.25	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)	(1) publicly sourced data (2) publicly sourced data (3) publicly sourced data (4) publicly sourced data (5) Data obtained from public source (6) Data obtained from public source
Service temperature	Intermittent	338	°F	-	2)	
Service temperature	Long Term	230	°F	-	3)	
Thermal expansion (CLTE)		2.7*10 <sup>-5</sup>	in/in/°F	ASTM D 696	4)	
Specific heat		0.3	BTU/lb-F°	-	5)	
Thermal conductivity		2.71	BTU-in/hr-ft <sup>2</sup> -	°F -	6)	
Electrical properties	condition	value		test method		comment
surface resistivity		1.0*10 <sup>14</sup>	Ω/square	ASTM D 257	1)	(1) Data obtained from public source (2) Data from public source
Volume resistivity		1.0*10 <sup>14</sup>	Ω*cm	-	2)	
Other properties	condition	value		test method		comment
Moisture absorption	@ saturation, 73 °F	0.30	%	ASTM D 570		
Moisture absorption	@ 24 hrs, 73 °F	0.25	%	ASTM D 570		•

Resin specification:

ASTM D6779-11 PA0110G30A00000 and ASTM D4066-01a (Reapproved 2008) PA0110G30A00000 Shapes specification: ASTM D5989-11 S-PA0101G3054444420

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Version: A1

Date: 2019/10/01

