

PA66 - polyamide 66

Other material names PA66: Polyamide 6.6, Nylon 6-6, 66, 6/6

Material group: Polyamide

Polyamide PA66 has good rigidity, hardness, abrasion resistance and thermal dimensional stability. In addition, PA66 has outstanding wear resistance and low frictional properties. It also has very good temperature, chemical, and impact properties. Users should be aware of PA66 propensity to absorb moisture which could affect dimensional stability. In fact, PA66 will tend to absorb more moisture at saturation than cast PA6G.



Color of material:

Natur



Typical applications:

- screw machined electrical insulators
- food contact parts



The material is used in:

Automobile industry
Engineering industry
Production of single-purpose machines

Features:

- good slide and wear properties electrically insulating
- good wear properties
- good weldable and bondable
- high strength
- resistant to many oils, greases and fuels
- high toughness

Material availability: Some sizes are in stock

Material properties table

Specific weight	1.14 g/cm ³
Yield strength	85 N/mm ²
Allowable mean pressure deformation 1%	25.00 N/mm ²
Allowable mean pressure deformation 2%	49.00 N/mm ²
Allowable mean pressure deformation 5%	90.00 N/mm ²
p.v dry limit	0.13 MPa.m/s
Flexural strength	135 N/mm ²
Tensibility	50 %
Flexural modulus	2 900 N/mm ²

Tensile modulus	3 000 N/mm ²
Impact toughness	bez zlomu
Notched toughness	>4 kJ/m ²
Ball hardness	170 N/mm ²
Friction coefficient	0.35
Sliding wear	0.10 um/km
Abrasive wear	160
Antistatic material	No
Permittivity	3.80
Electrical strength	27 kV/mm
Specific internal resistance	10 ¹² Ω
Specific surface resistance	10 ¹² Ω.cm
Melting point	265 °C
Thermal expansion	10 · 10 ⁻⁵ /K
Thermal conductivity	0.28 W/(K.m)
Permanent use temperature	-30 ; 100 °C
Transient temperature of use	-30 ; 150 °C
Absorbability	2,5 %
Water absorption	9 %
Resistance - oils	resistant
Acid resistance	conditionally resistant
Durability - alcali	conditionally resistant
Food contact	No

Engineering plastics are supplied in the form of bars, plates, strips, tubes and sheets. From the semi-finished products the company TechPlasty has regularly in stock, we also supply blanks.

All standard and special materials are designed to meet your specific requirements. Their mechanical, thermal, and electrical properties and chemical resistance satisfy the most demanding requirements and this allows them to work even in the most difficult conditions. If you need advice when choosing the appropriate material for your application, please contact us. We'll gladly advise you. You can utilize the long-term experience of our technical advisors free-of-charge, who can visit you right in your operation and solve your requirements for engineering plastics directly at the site of their usage.

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