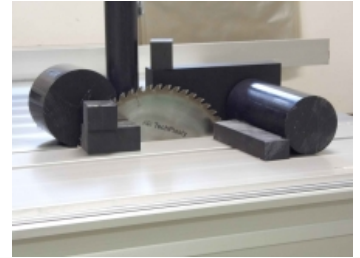


PA6G+oil - cast polyamide 6 with oil

Other material names PA6G+oil: PA6G with lubrication with oil, oil filled

Material group: Polyamide

This internally lubricated cast PA 6 is self-lubricating in the real meaning of the word. PA6G+oil developed for unlubricated, highly loaded and slow moving parts applications, yields a considerable enlargement of the application opportunities compared to standard cast PA6G. It offers a reduced coefficient of friction (up to 50% lower), considerably increasing the pressure-velocity capabilities, and a vastly improved wear resistance (up to 10 times better).



Color of material:

Black

Yellow



Typical applications:

- Drive element
- Guide rails
- Sliding profiles, slide bearings, slide rails
- Guide and track rollers
- Deflection pulleys



The material is used in:

Automobile industry
Wood processing
Packaging industry
Engineering industry
Woodprocessing industry
Construction machines
Production of single-purpose machines

Features:

- High mechanical strength, stiffness, hardness and toughness
- Good fatigue resistance
- High mechanical damping ability
- Good sliding properties
- Excellent wear resistance
- Good electrical insulating properties
- Good resistance to high energy radiation (gamma- and X-rays)
- Good machinability

Material availability: Material is in stock

Material properties table

Specific weight

1.14 g/cm³

Yield strength	80 N/mm ²
Allowable mean pressure deformation 1%	22.00 N/mm ²
Allowable mean pressure deformation 2%	43.00 N/mm ²
Allowable mean pressure deformation 5%	79.00 N/mm ²
p.v dry limit	0.23 MPa.m/s
Flexural strength	140 N/mm ²
Tensibility	50 %
Flexural modulus	2 800 N/mm ²
Tensile modulus	2 600 N/mm ²
Impact toughness	bez zlomu
Notched toughness	>5 kJ/m ²
Ball hardness	140 N/mm ²
Friction coefficient	0.18
Sliding wear	0.05 um/km
Antistatic material	No
Permittivity	3.70
Electrical strength	22 kV/mm
Specific internal resistance	10 ¹⁴ Ω
Specific surface resistance	10 ¹³ Ω.cm
Melting point	220 °C
Thermal expansion	8 10 ⁻⁵ /K
Thermal conductivity	0.23 W/(K.m)
Permanent use temperature	-40 ; 105 °C
Transient temperature of use	-40 ; 160 °C
Absorbability	1,8 %
Water absorption	5,5 %
Resistance - oils	resistant
Acid resistance	conditionally resistant
Durability - alkali	resistant
Food contact	No
Special features	• samomazné vlastnosti

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.

TechPlasty, s.r.o.

Kysucká 7/A
010 01 Žilina
Slovakia

