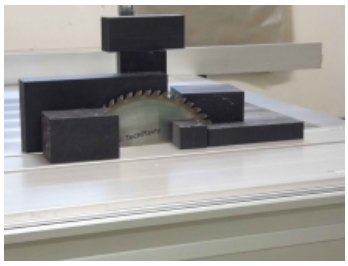
PA6G+MoS2 - cast polyamide with MoS2

Other material names PA6G+MoS2: PA6G cast nylon with MoS2, Moly, Molybden disulfid
Material group: Polyamide



Nylatron PA6G+MoS2 contains finely divided particles of molybdenum disulphide (MoS2) The addition of MoS2 brings about an increase in the degree of crystallinity, lending the cast polyamide a higher degree of strength, but without any appreciable deterioration of toughness. In addition, increasing the crystallinity of this PA6G results in improved surface hardness and better abrasion properties compared to standard PA6G.

Color of material:

Black

Typical applications:

- gears
- sheaves
- sprockets
- custom parts.

The material is used in:

Automobile industry
Engineering industry
Construction machines
Production of single-purpose machines

Features:

- good wear properties
- high toughness
- resistant to many oils, greases and fuels
- good damping
- good slide and wear properties
- high strength

Material availability: Some sizes are in stock

Material properties table

Specific weight	1.16 g/cm³
Yield strength	78 N/mm²
Allowable mean pressure deformation 1%	25.00 N/mm²
Allowable mean pressure deformation 2%	49.00 N/mm²
Allowable mean pressure deformation 5%	88.00 N/mm²
Tensibility	25 %
Tensile modulus	3 300 N/mm²
Impact toughness	bez zlomu
Notched toughness	>3 kJ/m²
Ball hardness	160 N/mm²
Friction coefficient	0.32
Sliding wear	0.10 um/km
Antistatic material	No

Permittivity	3.60
Electrical strength	24 kV/mm
Specific internal resistance	10^(13) Ω
Specific surface resistance	10^(12) Ω.cm
Melting point	220 °C
Thermal expansion	8 10^(-5)/K
Thermal conductivity	0.30 W/(K.m)
Permanent use temperature	-30 ; 105 °C
Transient temperature of use	-40 ; 170 °C
Absorbability	2,4 %
Water absorption	6,7 %
Resistance - oils	resistant
Acid resistance	conditionally resistant
Durability - alcali	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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