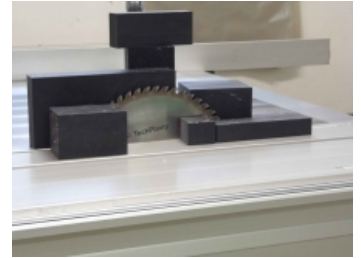


# PA6G+MoS2 - cast polyamide with MoS2

**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

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

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