

## PA 6.6 MOS2

**Chem. Designation:** Polyamid  
**DIN-Abbreviation:** PA 6.6 MOS2

Properties		Value	Unit	ISO/IEC
Density		1,15 / -		
Water absorption, relative 1)		0,2 / 0,4	%	62
Thermal Properties				
Crystalline melting point		253 / -	°C	-
Glass transition temperature		52 / -	°C	-
Thermal conductivity (23° C)		0,36 / -	W/(k·m)	-
Coefficient of thermal expansion: - average value between 23 and 60°C		10 · 10 <sup>-5</sup> / -	m/(m·K)	-
Coefficient of thermal expansion: - average value between 23 and 100°C		10 · 10 <sup>-5</sup> / -	m/(m·K)	-
Max. service temperature in air: -short periods 2		170 / -	°C	-
Max. service temperature in air: -continously: for min. 5000/20.000 h		100 / 80	°C	-
Minimum service temperature		-20 / -	°C	-
Flammability acc. to UL standard 94 (thickness 3mm/6mm)		HB / HB		-
Mechanical Properties (at 23°C)				
Tensile strength at yield/Tensile strength at break	dry	83 / -	MPa	527-1/-2
Elongation at break	dry	40 / -	%	527-1/-2
Modulus of elasticity in tension	dry	3200 / -	MPa	527-1/-2
Compression Test - 1% nominal strain	dry	20 / -	MPa	604
impact-strength - Charpy unnotched	dry	o.B. / -	kJ/m <sup>2</sup>	179/1eU
impact-strength Charpy notched	dry	5 / -	kJ/m <sup>2</sup>	179/1eA
Ball indentation hardness H 358 / 30 or H 961 / 30	dry	168 / -	N/mm <sup>2</sup>	2039-1
Coefficient of Friction 4)	dry	0,31 / 0,4	μ	
Flexural strength	dry	114 / -	MPa	178
Flexural Modulus of elasticity	dry	3100 / -	MPa	178
Compression modulus	dry	2700 / -	MPa	604
Compression Test - 2% nominal strain	dry	38 / -	MPa	604
Electrical Properties				
Dielectric strength	dry	35 / -	kV/mm	60243
Volume resistivity	dry	10 <sup>14</sup> / -	Ohm·cm	60093
Surface resistivity	dry	10 <sup>14</sup> / -	Ohm	60093
Comparative tracking index (CTI)	dry	CTI 600 / -	CTI	60112

dry = values referring to dry materials

moist = values referring to material in equilibrium with  
 = the standard atmosphere 23°C/50% RH

o.B. = no break

1) after 24/96h immersion in water of 23°C

2) only for short time exposure (a few hours) in applications where no or only a very low load is applied to the material

3) stress to produce 1% strain in 1000 h (s 1/1000)

4) p = 0,05 N/mm<sup>2</sup>, v = 0,6 m/s surface roughness C35 steel mating surface Ra 0,7 - 0,9

This table is a valuable help in the choice of material. The data listed here fall within the normal range of product properties. However, they are not guaranteed and they should not be used to establish material specification limits nor used alone as the basis of design. It has to be noted that fibre reinforced material shows an anisotropic behaviour (properties differ when measured parallel and perpendicular to be extrusion direction).