











Material Data Sheet










PA6G black MoS2

Chemical Designation : Cast Polyamide 6
 DIN-Abbreviation: PA 6 G MoS2
 Colours, fillers: black, Molybdändisulfid

Main features

-  wear resistant
 -  not electrically insulating
 -  tough
 -  resistant to many oils and greases
 -  UV and weather resistant
 -  shock absorbing
 -  good sliding properties even in dry running conditions
 -  -
 -  increased surface hardness
 -  very easily machined
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Preferred Fields

-  mechanical engineering
 -  transport and conveyor technology
 -  textile machinery
 -  building machinery
 -  printing machinery
 -  automotive engineering
 -  gears, couplings and engine construction
 -  packaging and paper processing machinery
 -  agricultural machinery
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Applications

Properties

Material Data Sheet	PA6G black MoS2		
Mechanical	dry / moist		standard
Tensile strength at yield	75	MPa	DIN EN ISO 527
Elongation at break	40 / 60*	%	DIN EN ISO 527
Modulus of elasticity in tension	3200 / 2800	MPa	DIN EN ISO 527
Hardness	145		DIN 53 456 (Kugeldruckhärte)
Impact strength 23° C (Charpy)	n.b.	KJ/m ²	DIN EN ISO 179 (Charpy)

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Thermal	dry / moist		standard
Crystalline melting point	210	°C	DIN 53 765
Glass transition temperature	40 / 5	°C	DIN 53 765
Max. service temperature			

short term	170	°C	
long term	100	°C	
Coefficient of thermal expansion (23-55°C)	9,5	10 ⁻⁵ 1/K	DIN 53 752

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Electrical	dry / moist	standard
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Miscellaneous	dry / moist	standard
Density	1,15	g/cm ³ DIN 53 479
Moisture absorption (23°C/50RH)	2,5	% DIN EN ISO 62
Water absorption to equilibrium	6	% DIN 53 495
Flammability acc. to UL standard 94	HB	
Resistance to hot water, washing soda:	(+)	
Resistance to weathering	+	

(1) Testing of semi-finished products

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