

# TRAIDAMID® G MoS<sub>2</sub> (PA6 C + MoS<sub>2</sub>)

**Density** 1,15 g/cm<sup>3</sup>

**Colour** Black opaque

**Chemical Designation** PA6 C ( Cast polyamide 6)

PROPERTIES	RESULT	UNIT	PARAMETER	NORM USED
<b>Mechanical properties</b>				
Modulus of elasticity	3200	MPa	1 mm/min	DIN EN ISO 527-2
Tensile strength	82	MPa	50 mm/min	DIN EN ISO 527-2
Tensile strength at yield	80	MPa	50 mm/min	DIN EN ISO 527-2
Elongation at yield	4	%	50 mm/min	DIN EN ISO 527-2
Elongation at break	55	%	50 mm/min	DIN EN ISO 527-2
Flexural strength	102	MPa	2 mm/min , 10 N	DIN EN ISO 178
Modulus of elasticity (flex test)	3000	MPa	2 mm/min , 10 N	DIN EN ISO 178
Compression strength	22 / 38	MPa	1% / 2%. 5 mm/min , 10 N	EN ISO 604
Compression modulus	2800	MPa	5 mm/min , 10 N	EN ISO 604
Impact strength (Charpy)	No break	Kj/m <sup>2</sup>	Max. 7,5j	DIN EN ISO 179-1EU
Notched Impact stren. (Charpy)	4	Kj/m <sup>2</sup>	Max. 7,5j	DIN EN ISO 179-1EU
Ball indentation hardness	170	MPa		ISO 2039-1
<b>Thermal properties</b>				
Glass transition temperature	43	°C		DIN 53765
Melting temperature	217	°C		DIN 53765
Service temperature	170	°C	Short term	
Service temperature	100	°C	Long term	
Thermal expansion	11	10 <sup>-5</sup> K <sup>-1</sup>	23-60°C long	DIN EN ISO 11359-1;2
Thermal expansion	11	10 <sup>-5</sup> K <sup>-1</sup>	23-100°C long	DIN EN ISO 11359-1;2
Specific heat	1,6	J/(g·K)		ISO 22007-4:2008
Thermal conductivity	0,33	W/(K·m)		ISO 22007-4:2008
<b>Electrical properties</b>				
Surface resistance	> 10 <sup>12</sup>	Ω		DIN IEC 60093
<b>Miscellaneous properties</b>				
Water absorption	0,2 / 0,5	%	24h / 96h (23°C)	DIN EN ISO 62
Resistance to hot mater / bases	(+)			
Resistance to weathering	(+)			
Flammability (UL94)	HB		According to	DIN IEC 60995-11-10

## MAIN CHARACTERISTICS

High strength  
 Resistant to many greases, oils and fuels  
 High toughness  
 Good slide and wear resistance  
 Good wear properties

## INDUSTRY APPLICATIONS

Heavy duty industry  
 Conveyor technology  
 Textile industry  
 Mechanical engineering  
 Engine manufacturing

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