

TRIDAMID® G MoS₂ (PA6 C + MoS₂)



Density 1,15 g/cm³

Colour Natural opaque

Chemical Designation PA6 C (Cast polyamide 6)

PROPERTIES	RESULT	UNIT	PARAMETER	NORM USED
Mechanical properties				
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 ²	Máx 7,5j	DIN EN ISO 179-1EU
Notched impact stren (Charpy)	4	Kj/m ²	Máx 7,5j	DIN EN ISO 179-1EU
Ball indentation hardness	170	MPa		ISO 2039-1
Thermal Properties				
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 ⁻⁵ K ⁻¹	23-60 °C long	DIN EN ISO 11359-1:2
Thermal expansion	11	10 ⁻⁵ K ⁻¹	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
Electrical Properties				
Surface resistance	10 ¹²	Ω		DIN IEC 60093
Miscellaneous Properties				
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