

What is PA6 G Glide plus

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PA 6 G, sliding grade PLUS

Glide plus is a form-polymerised cast polyamide 6 (PA 6 G) in an enhanced, grey-coloured lubricant compound. Compared to the standard sliding grade, it offers even more excellent sliding behaviour with low deformation under pressure load and high wear resistance.

Properties

Form-polymerisation produces a high-molecular, semi-crystalline thermoplastic with very good dimensional stability, available in large cross-sections and dimensions.

The PLUS compound is optimised for even lower-friction sliding and reduced deformation under sustained pressure load, while retaining high wear resistance.

Advantages

- Excellent sliding behaviour
- Low deformation under pressure load
- High wear resistance
- Good machinability

Disadvantages

- Moisture absorption up to 2 % in standard atmosphere
- Reduced strength and dimensional stability in thin-walled parts

Processing

Like other cast polyamides, Glide plus can be machined using all conventional cutting methods. As an unreinforced material, HSS tools are sufficient; good cooling via chip removal is important to avoid softening or smearing of the surface caused by heat build-up.

Because our semi-finished products are stress-relieved through annealing, machined parts achieve a high degree of dimensional stability.

Typical Applications

Glide plus is used wherever components need to slide with low friction under sustained high pressure load, for example in mechanical engineering, the steel industry and the electrical industry.

- Sliding elements in mechanical engineering
- Sliding and guide parts in the steel industry
- Components in the electrical industry

Typical Properties

- Excellent sliding behaviour
- Low deformation under pressure load
- High wear resistance

Product Examples

- Sliding strips
- Guide rails
- Sliding plates
- Wear parts

Typical Industries

- Mechanical Engineering
- Steel Industry
- Electrical Industry

	Test Method	Unit	Value
General Properties			
Density	DIN EN ISO 1183-1	g / cm ³	1.18

	Test Method	Unit	Value
Water absorption	DIN EN ISO 62	%	2
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB / HB
Mechanical Properties			
Yield stress	DIN EN ISO 527	MPa	70
Elongation at break	DIN EN ISO 527	%	4
Tensile modulus of elasticity	DIN EN ISO 527	MPa	4000
Impact strength	DIN EN ISO 179	kJ / m ²	2.5
Shore hardness (D)	DIN EN ISO 868	scale D	82
Thermal Properties			
Melting temperature	ISO 11357-3	°C	217
Thermal conductivity	DIN 52612-1	W / (m·K)	0.25
Specific thermal capacity	DIN 52612	kJ / (kg·K)	1.7
Coefficient of linear thermal expansion	DIN 53752	10 ⁻⁶ / K	60
Service temperature, long term	Average	°C	-40 ... 110
Service temperature, short term (max.)	Average	°C	< 170
Heat deflection temperature	DIN EN ISO 75, Verf. A, HDT	°C	100