

TECASINT 6062 black - Direct Forming

Chemical Designation

PI (Polyimide)

Colour

black

Density

1.51 g/cm³

Fillers

graphite, PTFE

Production process: direct forming

Main features

- excellent slip-stick properties
- very good slide and wear properties
- resistance against high energy radiation
- good chemical resistance
- sensitive to hydrolysis in higher thermal range

Target Industries

- mechanical engineering
- automotive industry
- aircraft and aerospace technology

Mechanical properties	parameter	value	unit	norm	comment
Tensile strength	50 mm/min	50	MPa	DIN EN ISO 527-1	
Modulus of elasticity (tensile test)	1 mm/min	4100	MPa	DIN EN ISO 527-1	
Elongation at break (tensile test)	50 mm/min	2.1	%	DIN EN ISO 527-1	
Flexural strength	10 mm/min	75	MPa	DIN EN ISO 178	
Modulus of elasticity (flexural test)	2 mm/min	4200	MPa	DIN EN ISO 178	
Elongation at break (flexural test)	10 mm/min	2.3	%	DIN EN ISO 178	
Compression strength	10 mm/min	125	MPa	EN ISO 604	
Compression strength	10mm/min, 10% strain	120	MPa	EN ISO 604	
Compressive strain at break	10 mm/min	17	%	EN ISO 604	
Shore hardness	Shore D	82		DIN EN ISO 868	
Thermal properties	parameter	value	unit	norm	comment
Glass transition temperature		286	°C	-	1)
Thermal expansion (CLTE)	50-200°C	2.2 / -	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	2)
Thermal expansion (CLTE)	200-300°C	5.8 / -	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	3)
Other properties	parameter	value	unit	norm	comment
Water absorption	24 h in water, 23°C	0.2	%	DIN EN ISO 62	
Flammability (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)

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