

TECASINT 2061 black - halvfabrikat

Kemisk beteckning

PI (polyimid)

Färg

Antracit

Densitet

1.52 g/cm³

Fillers

15% grafit, 10% PTFE

Huvud egenskaper

- mycket bra glid- och slitenskaper
- Bra slitstyrka
- hög termisk och mekanisk kapacitet
- motstånd mot hög energi strålning
- bra kemisk resistans
- känslig för hydrolys i högre termiska intervall

Målindustrier

- bilindustrin
- flygplan och rymdteknik
- transportteknik
- maskinteknik
- precisions teknik
- textil industrin
- vakuumenteknik

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet	50 mm/min	63	MPa	DIN EN ISO 527-1	(1) eU (2) eA
Elasticitetsmodul (dragprov)	1 mm/min	3900	MPa	DIN EN ISO 527-1	
Brottförlängning	50 mm/min	2.7	%	DIN EN ISO 527-1	
Böjållfasthet	10 mm/min	89	MPa	DIN EN ISO 178	
Elasticitetsmodul (böjningstest)	2 mm/min	3400	MPa	DIN EN ISO 178	
Brottförlängning (böjtest)	10 mm/min	3.1	%	DIN EN ISO 178	
Kompressionsstyrka	10 mm/min	150	MPa	EN ISO 604	
Kompressionsstyrka	10mm/min, 10% strain	126	MPa	EN ISO 604	
Kompressionsmodul	1 mm/min	1600	MPa	EN ISO 604	
tryckhållfasthet vid brott	10 mm/min	16.4	%	EN ISO 604	
slagstyrka (charpy)	max 7.5 J	19.4	kJ/m ²	DIN EN ISO 179-1	1)
Skårslahseghet (Charpy)	max 7.5 J	3.2	kJ/m ²	DIN EN ISO 179-1	2)
Shore hårdhet	Shore D	84		DIN EN ISO 868	

Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur			°C	-	1)
termisk expansion	50-200°C	4.0 /	10 ⁻⁵ K ⁻¹	DIN 53 752	2)
termisk expansion	200-300°C	5.0 /	10 ⁻⁵ K ⁻¹	DIN 53 752	3)

Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24 h in water, 23°C	0.63	%	DIN EN ISO 62	(1) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
Vatten absorption	24 h in water, 80°C	1.8	%	DIN EN ISO 62	
Brandklassning (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)

→ TECASINT 2000 series show significant water uptake. Parts have to be pre-dried before fast heating to above 200 °C (drying process: 2 h per 3 mm wall thickness at 150 °C).

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