

TECASINT 4021 black - halvfabrikat

Kemisk beteckning

PI (polyimid)

Färg

Antracit

Densitet

1.49 g/cm³

Fillers

15% grafit

Huvud egenskaper

- mycket hög termisk och oxidativ resistans
- mycket låg vattenabsorption
- mycket bra glid- och slitegenskaper
- hög termisk och mekanisk kapacitet
- bra kemisk resistans
- högt krypmotstånd
- motstånd mot hög energi strålning
- känslig för hydrolys i högre termiska intervall

Målindustrier

- bilindustrin
- transportteknik
- varm glasteknik
- maskinteknik
- precisions teknik

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet	50 mm/min	93	MPa	DIN EN ISO 527-1	(1) eU
Elasticitetsmodul (dragprov)	1 mm/min	4943	MPa	DIN EN ISO 527-1	(2) eA
Brottförlängning	50 mm/min	3	%	DIN EN ISO 527-1	
Böjgållfasthet	10 mm/min	131	MPa	DIN EN ISO 178	
Elasticitetsmodul (böjningstest)	2 mm/min	4200	MPa	DIN EN ISO 178	
Brottförlängning (böjtest)	10 mm/min	3.4	%	DIN EN ISO 178	
Kompressionsstyrka	10 mm/min	208	MPa	EN ISO 604	
Kompressionsstyrka	10mm/min, 10% strain	163	MPa	EN ISO 604	
tryckhållfasthet vid brott	10 mm/min	36	%	EN ISO 604	
Kompressionsmodul	1 mm/min	2067	MPa	EN ISO 604	
slagstyrka (charpy)	max 7.5 J	24.4	kJ/m ²	DIN EN ISO 179-1	1)
Skårsläseghet (Charpy)	max 7.5 J	3.8	kJ/m ²	DIN EN ISO 179-1	2)
Shore hårdhet	Shore D	86		DIN EN ISO 868	
Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur		260	°C	DIN EN ISO 11357	(1) Thermal expansion XY/Z axis
termisk expansion	50-200°C	3.9 / 5.4	10 ⁻⁵ K ⁻¹	DIN 53 752	1)
termisk expansion	200-300°C	5.3 / 7.3	10 ⁻⁵ K ⁻¹	DIN 53 752	2)
termisk expansion	300-350°C	7.5 / 10.5	10 ⁻⁵ K ⁻¹	DIN 53 752	3)
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24 h in water, 23°C	0.16	%	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	0.53	%	DIN EN ISO 62	
Brandklassning (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)

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