

TECASINT 2021 black - halvfabrikat

Kemisk beteckning

PI (polyimid)

Färg

Svart

Densitet

1.45 g/cm³

Fillers

15% grafit

Huvud egenskaper

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

Målindustrier

- maskinteknik
- precisions teknik
- bilindustrin
- flygplan och rymdteknik
- kryogenteknik
- transportteknik
- varm glasteknik

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning	
Draghållfasthet	50 mm/min	101	MPa	DIN EN ISO 527-1	(1) eU (2) eA	
Elasticitetsmodul (dragprov)	1 mm/min	4400	MPa	DIN EN ISO 527-1		
Brottförlängning	50 mm/min	4.5	%	DIN EN ISO 527-1		
Böjållfasthet	10 mm/min	145	MPa	DIN EN ISO 178		
Elasticitetsmodul (böjningstest)	2 mm/min	4000	MPa	DIN EN ISO 178		
Brottförlängning (böjtest)	10 mm/min	4.6	%	DIN EN ISO 178		
Kompressionsstyrka	10 mm/min	280	MPa	EN ISO 604		
Kompressionsstyrka	10mm/min, 10% strain	160	MPa	EN ISO 604		
Kompressionsmodul	1 mm/min	1900	MPa	EN ISO 604		
tryckhållfasthet vid brott	10 mm/min	43	%	EN ISO 604		
slagstyrka (charpy)	max 7.5 J	36.7	kJ/m ²	DIN EN ISO 179-1	1)	
Skårslahseghet (Charpy)	max 7.5 J	2.9	kJ/m ²	DIN EN ISO 179-1	2)	
Shore hårdhet	Shore D	87		DIN EN ISO 868		
Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning	
Glasövergångstemperatur		357	°C	-	1)	(1) DMA, maximum loss factor tan δ
värmeförvrängning temperatur	1.8 MPa	335	°C	DIN 53 461		(2) Thermal expansion XY/Z axis
termisk expansion	50-200°C	3.8 / 4.5	10 ⁻⁵ K ⁻¹	DIN 53 752	2)	(3) Thermal expansion XY/Z axis
termisk expansion	200-300°C	4.6 / 5.4	10 ⁻⁵ K ⁻¹	DIN 53 752	3)	
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning	
Vatten absorption	24 h in water, 23°C	0.61	%	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	1.69	%	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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