

TECASINT 4121 black - halvfabrikat

Kemisk beteckning

PI (polyimid)

Färg

Antracit

Densitet

1.53 g/cm³

Fillers

15% grafit

Huvud egenskaper

- mycket hög termisk och oxidativ resistans
- mycket bra glid- och slitegenskaper
- hög termisk och mekanisk kapacitet
- mycket låg vattenabsorption
- högt krypmotstånd
- bra kemisk resistans
- 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	6600	MPa	DIN EN ISO 527-1	(2) eA
Brottförlängning	50 mm/min	1.6	%	DIN EN ISO 527-1	
Böjållfasthet	10 mm/min	113	MPa	DIN EN ISO 178	
Elasticitetsmodul (böjningstest)	2 mm/min	6100	MPa	DIN EN ISO 178	
Brottförlängning (böjtest)	10 mm/min	1.8	%	DIN EN ISO 178	
Kompressionsstyrka	10 mm/min	200	MPa	EN ISO 604	
Kompressionsstyrka	10mm/min, 10% strain	183	MPa	EN ISO 604	
tryckhållfasthet vid brott	10 mm/min	15	%	EN ISO 604	
Kompressionsmodul	1 mm/min	2200	MPa	EN ISO 604	
slagstyrka (charpy)	max 7.5 J	11	kJ/m ²	DIN EN ISO 179-1	1)
Skårsläseghet (Charpy)	max 7.5 J	1.4	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		n.a.	°C	DIN EN ISO 11357	(1) Thermal expansion XY/Z axis
termisk expansion	50-200°C	3.3 / 5.0	10 ⁻⁵ K ⁻¹	DIN 53 752	1)
termisk expansion	200-300°C	4.2 / 6.6	10 ⁻⁵ K ⁻¹	DIN 53 752	2)
termisk expansion	300-400°C	6.0 / 9.7	10 ⁻⁵ K ⁻¹	DIN 53 752	3)
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24 h in water, 23°C	0.08	%	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	0.38	%	DIN EN ISO 62	
Brandklassning (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values that can be used primarily for comparison purposes for material selection. These values are within the normal tolerance range of product properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. Unless otherwise noted, these values were determined by tests at reference dimensions and machined specimen. As the properties depend on the dimensions of the semi-finished products and the orientation in the component (esp. in reinforced grades), the material may not be used without a separate testing under individual circumstances. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. Data sheet values are subject to periodic review, the most recent update can be found at www.ensingerplastics.com. Technical changes reserved.