

TECAST L yellow - halvfabrikat

Kemisk beteckning

PA 6 C (Gjuten polyamid 6)

Färg

gul solid

Densitet

1.14 g/cm³

Fillers

olja

Huvud egenskaper

- bra glid och slittegenskaper
- bra slittegenskaper
- elektriskt isolerande
- hög seghet
- resistent mot många oljor, fetter och bränslen
- hög styrka

Målindustrier

- maskinteknik
- bilindustrin
- tung industri

Data genereras direkt efter bearbetning (standardklimat Tyskland).

Mekaniska Egenskaper	parameter	värde	enhet	norm	anmärkning
Draghållfasthet	50mm/min	70	MPa	DIN EN ISO 527-2	(1) For tensile test: specimen type 1b
Elasticitetsmodul (dragprov)	1mm/min	3100	MPa	DIN EN ISO 527-2	(2) For flexural test: support span 64mm, norm specimen.
Böjghållfasthet	50mm/min	68	MPa	DIN EN ISO 527-2	(3) Specimen 10x10x10mm
Dragtöjning	50mm/min	4	%	DIN EN ISO 527-2	(4) Specimen 10x10x50mm, modulus range between 0.5 and 1% compression.
Brottförlängning	50mm/min	50	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
Böjghållfasthet	2mm/min, 10 N	95	MPa	DIN EN ISO 178	n.b. = not broken
Elasticitetsmodul (böjningstest)	2mm/min, 10 N	2900	MPa	DIN EN ISO 178	
Kompressionsstyrka	1% / 2% / 5% 5mm/min, 10 N	21/37/78	MPa	EN ISO 604	(3)
Kompressionsmodul	5mm/min, 10 N	2700	MPa	EN ISO 604	(4)
slagstyrka (charpy)	max. 7.5J	n.b.	kJ/m ²	DIN EN ISO 179-1eU	(5)
Skårslahseghet (Charpy)	max. 7.5J	6	kJ/m ²	DIN EN ISO 179-1eA	
Shore hårdhet	D	80		DIN EN ISO 868	
Värmeledningsförmåga	parameter	värde	enhet	norm	anmärkning
Glasövergångstemperatur		42	°C	DIN EN ISO 11357	(1)
Smält temperatur		216	°C	DIN EN ISO 11357	
Service temperatur	short term	170	°C		(2)
Service temperatur	long term	100	°C		
termisk expansion	23-60°C, long.	13	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
termisk expansion	23-100°C, long.	13	10 ⁻⁵ K ⁻¹	DIN EN ISO 11359-1;2	
Specifik värme		1.7	J/(g*K)	ISO 22007-4:2008	
Värmeledningsförmåga		0.37	W/(K*m)	ISO 22007-4:2008	
Elektriska egenskaper	parameter	värde	enhet	norm	anmärkning
Specifikt ytmotstånd		10 ¹⁴	Ω	DIN IEC 60093	
Specifik volymr esistans		10 ¹⁴	Ω*cm	DIN IEC 60093	
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24h / 96h (23°C)	0.2 / 0.4	%	DIN EN ISO 62	(1) Ø ca. 50mm, h=13mm
Motstånd mot varmvatten / baser		(+)		-	(2) (+) limited resistance
Motståndskraft förvittring		-		-	(3) - poor resistance
Brandklassning (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	(4) 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.

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 (typically rods with diameter 40-60 mm according to DIN EN 15860) on cast 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.