

TECAST L black - halvfabrikat

Kemisk beteckning

PA 6 C (Gjuten polyamid 6)

Färg

Svart solid

Densitet

1.14 g/cm³

Fillers

olja

Huvud egenskaper

- bra glid och slitenskaper
- hög seghet
- bra slitenskaper
- 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	1) (2) For flexural test: support span 64mm, norm specimen.
Böjgållfasthet	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.
Brottörlängning	50mm/min	50	%	DIN EN ISO 527-2	(5) For Charpy test: support span 64mm, norm specimen.
Böjgållfasthet	2mm/min, 10 N	95	MPa	DIN EN ISO 178	2) 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	5	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) (1) Found in public sources.
Smält temperatur		216	°C	DIN EN ISO 11357	(2) Found in public sources.
Service temperatur	short term	170	°C		2) Individual testing regarding application conditions is mandatory.
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	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω	DIN IEC 60093	1) (1) Specimen in 20mm thickness
Specifik volymr esistans	Silver electrode, 23°C, 12% r.h.	10 ¹⁴	Ω*cm	DIN IEC 60093	2) (2) Due to the black colourant and moisture uptake of the material the electrical insulation properties cannot be 100% guaranteed, despite single measurements suggesting otherwise.
Dielektrisk styrka	23°C, 50% r.h.	21	kV/mm	ISO 60243-1	3) (3) Specimen in 1mm thickness
Motståndskraft mot spårning (CTI)	Platin electrode, 23°C, 50% r.h., solvent A	600	V	DIN EN 60112	
Övriga egenskaper	parameter	värde	enhet	norm	anmärkning
Vatten absorption	24h / 96h (23°C)	0.2 / 0.4	%	DIN EN ISO 62	1) (1) Ø ca. 50mm, h=13mm
Motstånd mot varmvatten / baser		(+)		-	2) (2) (+)limited resistance
Motståndskraft förvittring		(+)			3) (3) 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.
Brandklassning (UL94)	corresponding to	HB		DIN IEC 60695-11-10;	3)

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