

TECANAT HT

Chemical Designation :
 DIN-Abbreviation:

PC-HT

Colours, fillers:

Main features

Preferred Fields

Applications

Properties

Mechanical	dry / moist		standard
Tensile strength at yield	65	MPa	DIN EN ISO 527
Elongation at yield		%	
Tensile strength at break		MPa	
Elongation at break	7	%	DIN EN ISO 527
Modulus of elasticity in tension	2300	MPa	DIN EN ISO 527
Modulus of elasticity after flexural test	2200	MPa	DIN EN ISO 527
Hardness	115		DIN 53 456 (Kugeldruckhärte)
Impact strength 23° C (Charpy)	n.b.	KJ/m ²	DIN EN ISO 179 (Charpy)
Creep rupture strength after 1000 h with static load		MPa	
Time yield limit for 1% elongation after 1000 h		MPa	

Co-efficient of friction
 $\mu = 0,05$ N/mm²v=0,6 m/s
 on steel, hardened and ground

Wear μm/km
 $\mu = 0,05$ N/mm²v=0,6 m/s
 on steel, hardened and ground

Thermal	dry / moist		standard
Crystalline melting point		°C	
Glass transition temperature	180	°C	DIN 53 765
Heat distortion temperature HDT, Method A	161-197	°C	ISO-R 75 Verfahren A (DIN 53 461)
Heat distortion temperature HDT, Method B	173-195	°C	ISO-R 75 Verfahren B (DIN 53 461)
Max. service temperature			
short term	170	°C	
long term	140	°C	
Thermal conductivity (23° C)		W/(K·m)	
Specific heat (23° C)		J/g.K	
Coefficient of thermal expansion (23-55°C)	7	10 ⁻⁵ 1/K	DIN 53 752

Properties

Electrical	dry / moist	standard
Dielectric constant (10^6 Hz)	2,9	DIN 53 483, IEC-250
Dielectric loss factor (10^6 Hz)	0,01	DIN 53 483, IEC-250
Specific volume resistance	$> 10^{16}$ Ω *cm	DIN IEC 60093
Surface resistance	10^{15} Ω	DIN IEC 60093
Dielectric strength	35 kV/mm	DIN 53 481, IEC-243, VDE 0303 Teil 2
Resistance to tracking	CTI 600	DIN 53 480, VDE 0303 Teil 1

Miscellaneous	dry / moist	standard
Density	1,15 g/cm ³	DIN 53 479
Moisture absorption (23°C/50RH)	0,2 %	DIN EN ISO 62
Water absorption to equilibrium	%	DIN EN ISO 62
Flammability acc. to UL standard 94	HB	

(1) Testing of semi-finished products

The above information corresponds with our current knowledge and indicates our products and possible applications. We cannot give a legally binding guarantee of chemical resistance, of certain properties and the suitability of our products and their applications. Our products are not destined for use in medical and dental implants. Existing commercial patents must be observed. Unless otherwise stated, these values represent averages taken from injection moulding samples, dry as moulded. We reserve the right to make technical alterations.