

TECAFORM AH SD

Chemical Designation : Polyoxymethylen (Copolymer)
DIN-Abbreviation: POM-C
Colours, fillers: beige

Main features

- | | |
|------------------------------|--------------------------------|
| antistatic | carbon free |
| resistant to cleaning agents | resistant to numerous solvents |
| wear resistant | rigid |
| strong | tough |
| good sliding properties | difficult to bond |
| easily machined | |
-

Preferred Fields

- | | |
|--------------------------|--|
| Semiconductor technology | electrical protection |
| explosion protection | clean room technology |
| chemical engineering | mining industry |
| textile machinery | computer technology |
| business machines | packaging and paper processing machinery |
-

Applications

Tool carriers, friction strips, housing parts, friction bearings, tooth gears, slide plates, rollers, chip containers, seals, chip magazines

Properties

Mechanical	dry / moist		standard
Tensile strength at yield	45	MPa	DIN EN ISO 527
Elongation at yield		%	
Tensile strength at break		MPa	
Elongation at break	> 25	%	DIN EN ISO 527
Modulus of elasticity in tension	1400	MPa	DIN EN ISO 527
Modulus of elasticity after flexural test	1450	MPa	DIN EN ISO 178
Hardness			
Impact strength 23° C (Charpy)	100	KJ/m ²	ASTM D 256 (Izod)
Creep rupture strength after 1000 h with static load		MPa	
Time yield limit for 1% elongation after 1000 h		MPa	
Co-efficient of friction p = 0,05 N/mm ² v=0,6 m/s on steel, hardened and ground	0,18		
Wear			
p = 0,05 N/mm ² v=0,6 m/s on steel, hardened and ground		µm/km	
Thermal			
Crystalline melting point		°C	
Glass transition temperature	-60	°C	DIN 53 765
Heat distortion temperature HDT, Method A	88	°C	ISO-R 75 Verfahren A (DIN 53 461)
Heat distortion temperature HDT, Method B		°C	ISO-R 75 Verfahren B (DIN 53 461)
Max. service temperature			
short term	140	°C	
long term	100	°C	
Thermal conductivity (23° C)	0,3	W/(K·m)	
Specific heat (23° C)		J/g.K	
Coefficient of thermal expansion (23-55°C)	6,5	10 ⁻⁵ /K	DIN 53 752

Properties

Electrical	dry / moist		standard
Dielectric constant (10 ⁶ Hz)			
Dielectric loss factor (10 ⁶ Hz)			
Specific volume resistance	10 ⁹ -10 ¹¹	*cm	DIN IEC 60093
Surface resistance	10 ⁹ -10 ¹¹		DIN IEC 60093
Dielectric strength		kV/mm	
Resistance to tracking			
Miscellaneous	dry / moist		standard
Density	1,33	g/cm ³	DIN 53 479
Moisture absorption (23°C/50RH)	0,25	%	DIN EN ISO 62
Water absorption to equilibrium	~0,8	%	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.
