Material Data Sheet, July 2010

TECAFORM AH ID

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

Main features

- noticeable with metal detector
- rigid
- good sliding properties
- resistant to numerous solvents
- easily machined
- strong
- tough
- resistant to cleaning agents
- difficult to bond
- easily polished

Preferred Fields

- food technology
- packaging technology
- precision engineering
- transport and conveyor technology
- mechanical engineering
- domestic appliance

Applications

agitators and kneeding elements, housing parts, friction bearings, friction strips, gears, plugs, tool supports, rollers, seals

Properties

Mechanical	**dry / moist**		**standard**
Tensile strength at yield	69	MPa	DIN EN ISO 527
Elongation at yield		%	
Tensile strength at break		MPa	

Elongation at break	10	%	DIN EN ISO 527
Modulus of elasticity in tension	3200	MPa	DIN EN ISO 527
Modulus of elasticity after flexural test		MPa	
Hardness			DIN 53 456 (Kugeldruckhärte)
Impact strength 23º C (Charpy)		KJ/m²	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 p = 0,05 N/mm²v=0,6 m/s on steel, hardened and ground			
Wear p = 0,05 N/mm²v=0,6 m/s on steel, hardened and ground		µm/km	

Thermal	**dry / moist**		**standard**
Crystalline melting point		°C	
Glass transition temperature	-60	°C	DIN 53 765
Heat distortion temperature HDT, Method A	110	°C	ISO-R 75 Verfahren A (DIN 53 461)
Heat distortion temperature HDT, Method B	160	°C	ISO-R 75 Verfahren B (DIN 53 461)
Max. service temperature			
short term	140	°C	
long term	100	°C	
Thermal conductivity (23º C)		W/(K·m)	
Specific heat (23º C)		J/g.K	
Coefficient of thermal expansion (23-55ºC)		10^{-5}1/K	DIN 53 752

Properties

Electrical	**dry / moist**		**standard**
Dielectric constant (10^6 Hz)			DIN 53 483, IEC-250
Dielectric loss factor (10^6 Hz)			DIN 53 483, IEC-250
Specific volume resistance	10^13	*cm	DIN IEC 60093
Surface resistance	10^13		DIN IEC 60093
Dielectric strength		kV/mm	DIN 53 481, IEC-243, VDE 0303 Teil 2
Resistance to tracking			DIN 53 480, VDE 0303 Teil 1

Miscellaneous	**dry / moist**		**standard**
Density	1,48	g/cm^3	DIN 53 479
Moisture absorption (23°C/50RH)		%	DIN EN ISO 62
Water absorption to equilibrium		%	DIN EN ISO 62
Flammability acc. to UL standard 94			

(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.