

## POLIPOM® (Polyacetal Copolymer) , POM C

Polipom is Polimersan's standart Polyacetal Copolymer. General specifications are good impact resistance, good resistance, easy to machine, high dimensional stabilisation, low moisture absorption. Typical fields of application are mechanical engineering, electrical and electronic industries , medical technology.

GENERAL PROPERTIES	TEST METHOD	UNIT	VALUE
Colour	—————	—————	Natural and black
Density	ISO 1183-1	gr/cm <sup>3</sup>	1,41
Water Absorption (after 24/96 hours in 23 °C water)	ISO 62	mg	21/38
Saturation in 23 °C and %50 RH air condition	—————	%	0,2
Saturation in 23 °C water	—————	%	0,8
THERMAL PROPERTIES			
Melting temperature (DCS,10°C/min) <b>(1)</b>	ISO 11357-1/-3	°C	163
Glass transition temperature (DCS,20°C/min) <b>(2)</b>	ISO 11357-1/-2	°C	—————
DTUL @ 1.8 Mpa	ISO 75-1/-2	°C	91
Vicat softening temperature B50 (50°C/h 50N) <b>(3)</b>	ISO 306	°C	160
Coeff.of linear therm. Expansion (parallel)	ISO 11359 - 2		1,1
Coeff.of linear therm. Expansion (normal)	ISO 11359 - 2		1
Service temperature, short term <b>(4)</b>	—————	°C	138
Continuously 5000/20000 hours <b>(5)</b>	—————	°C	114/100
Minimum service temperature <b>(6)</b>	—————	°C	-50
MECHANICAL PROPERTIES			
TENSILE TEST			
Tensile stress at yield (50mm/min)	ISO 527-2-1A	Mpa	61
Tensile modulus (1mm/min)	ISO 527-2-1A	Mpa	2400
Tensile strain at yield (50mm/min)	ISO 527-2-1A	%	11
Flexural modulus (23°C)	ISO 178	Mpa	2400
Charpy impact strength-Unnotched	ISO 179/1A	Kg/m <sup>2</sup>	—————
Charpy notched impact strength @23°C	ISO 179/1A	Kg/m <sup>2</sup>	8,5
Shore hardness	ISO 868	ShoreD	81

(1), (2) and (3) The figures given for these properties are the most part derived from raw material supplier data and other publications.

(4) Only for very short time exposure in applications where no or only a very low load is applied to the material.

(5) Mechanical properties in maximum allowable service temperature are below than properties in 23 °C .

(6) Impact strength in minimum allowable service temperature is lower than measured impact strength in 23 °C .