

RHONDAMA LIMITED POM FDA

POM White

Polyoxymethelene/Polyacetal

Mechanical, physical and thermal properties

Properties	Condition	Standard	Unit			
Colour				White		White
Density/specific gravity	23°C	DIN 53479	Kg/m ³	1410	g/cm ³	1,41
Hardness	23°C	ISO 868	Shore D	85±3	Shore D	85±3
Ball indentation hardness	23°C	DIN 53456 H135/30	MPa	160	Psi	23000
Tensile strength	23°C	ASTM D 4745-79	MPa	70	Psi	10100
Elongation at break	23°C	ASTM D 4745-79	%	40	%	40
Compressive strength	23°C	DIN 53455	MPa	88	Psi	12800
Thermal conductivity	23°C	DIN 52612	$\frac{J \times 10^3}{m \times h \times K}$	0,25	$\frac{J \times 10^3}{m \times h \times K}$	0,25
Coefficient of thermal expansion	23°C-200°C		K ⁻¹ × 10 ⁻⁵	7	K ⁻¹ × 10 ⁻⁵	7
Coefficient of friction	*		μ	0,28	μ	0,28
Minimum service temperature			°C	-45	°F	-49
Maximum service temperature			°C	100	°F	212
Young's modulus		DIN 53457	MPa	3000	Psi	435000

* dynamic coefficient of friction, dry, steel 16MnCr5: v=0,6 m/s; p=0,05 MPa; t=5h

Chemical Properties

Copolymer, based on ethylenoxide

Resistant to: fuels, water, lyes, lubricants, alcohols and solvents

Not resistant to: strong mineral acids, oxidising chemicals, ethers; limited resistant to UV radiation and long term hot water

Detailed information concerning chemical resistance see Rhondama Compatibility Chart

Foodstuff approval: FDA Approval