

# POM Copolymer Balls

**Formula:** Acetal - Copolymer POMC

**Diameter:** 12.7mm

**Quantity:** 10 Pcs

**UOM Code:** 046-918-86

**SKU:** 1000006619-group

**Product Code:** OX30-SP-000150

## Material Properties for Polymers

### Chemical Resistance

Element	Value
Acids - concentrated	Poor
Acids - dilute	Good-Fair
Alcohols	Good-Fair
Alkalis	Good
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogenated Hydrocarbons	Good-Poor
Halogens	Poor
Ketones	Good - Fair

### Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.7-4.4
Dissipation factor @ 1MHz	0.006-0.18
Dielectric strength( kV mm <sup>2</sup> ) 20@2.3mm	
Surface resistivity( Ohm/sq )	10 <sup>1?</sup>
Volume resistivity( Ohmcm )	10 <sup>1?</sup>

### Physical Properties

Element	Value
Flammability	HB
Radiation resistance	Poor

<b>Element</b>	<b>Value</b>
Resistance to Ultra-violet	Poor
Limiting oxygen index( % )	15
Water absorption - equilibrium( % )	0.6-0.8
Water absorption - over 24 hours( % )	0.2-0.25
Density( gcm <sup>3</sup> )	1.41

## **Mechanical Properties**

<b>Element</b>	<b>Value</b>
Hardness - Rockwell	M80
Poisson's ratio	0.35
Elongation at break( % )	15-40
Tensile modulus( GPa )	2.3-2.8
Izod impact strength( J m <sup>-1</sup> )	70-80
Tensile strength( MPa )	60-70

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 0.45MPa( C )	160
Heat-deflection temperature - 1.8MPa( C )	110
Lower working temperature( C )	-40
Upper working temperature( C )	80-120
Specific heat( J K <sup>-1</sup> kg <sup>-1</sup> )	1500
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	0.23-0.3@23°C
Coefficient of thermal expansion( x10 <sup>-4</sup> K <sup>-1</sup> )	80-120