

# POM Homopolymer Granules

**Formula:** Acetal - Homopolymer POMH

**Nominal Granule Size:** 3mm

**Weight:** 1000g

**Type:** Injection Moulding

**Colour:** Natural

**CAS Number:** 9002-81-7

**UOM Code:** 087-998-01

**SKU:** 1000012565-group

**Product Code:** OX31-GL-000110

## Material Properties for Polymers

### Chemical Resistance

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

### Mechanical Properties

Element	Value
Coefficient of friction	0.2-0.35
Hardness - Rockwell	M94
Poisson's ratio	0.35
Elongation at break( % )	40-75
Tensile modulus( GPa )	2.9-3.1
Izod impact strength( J m <sup>21</sup> )	75-130
Tensile strength( MPa )	70

## Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.7
Dissipation factor @ 1MHz	0.005
Dielectric strength( kV mm <sup>-1</sup> )	20
Surface resistivity( Ohm/sq )	10 <sup>12</sup>
Volume resistivity( Ohmcm )	10 <sup>12</sup>

## Physical Properties

Element	Value
Flammability	HB
Radiation resistance	Poor
Resistance to Ultra-violet	Poor
Limiting oxygen index( % )	15
Water absorption - equilibrium( % )	0.6-0.9
Water absorption - over 24 hours( % )	0.25
Density( gcm <sup>-3</sup> )	1.42

## Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa( C )	170
Heat-deflection temperature - 1.8MPa( C )	135
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> )	0.22-0.24@23°C
Coefficient of thermal expansion( x10 <sup>-5</sup> K <sup>-1</sup> )	122