

# ESD 60 POM Copolymer Rod

**Grade:** ESD 60

**Formula:** Acetal - Copolymer POMC

**Diameter:** 30mm

**Length:** 200mm

**Colour:** Black

**UOM Code:** 233-917-61

**SKU:** 1000098393-group

**Product Code:** OX30-RD-000131

## 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>-1</sup> )	20@2.3mm
Surface resistivity( Ohm/sq )	10 <sup>12</sup>
Volume resistivity( Ohmcm )	10 <sup>12</sup>

### Physical Properties

Element	Value
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Flammability	HB
Radiation resistance	Poor
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

Element	Value
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

Element	Value
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