

## Polyplastics Duracon® M450-44/M450S Acetal Co-polymer (POM), Standard, Super high flow, High cycle

Category : Polymer , Thermoplastic , Acetal (POM) , Acetal Copolymer, Unreinforced

### Material Notes:

DURACON® is a crystalline thermoplastic acetal copolymer. The primary raw material trioxane, a trimer of formaldehyde. The thermoplastic adopts a copolymer structure in which polyoxymethylene (-C-O) and carbon-carbon (-C-C- bond) comonomer groups are incorporated into its main chain. Therefore the copolymer has superior chemical and thermal stability, compared with acetal homopolymer. Acetal co-polymer is well-balanced in terms of mechanical, chemical and thermal properties, and its superior moldability allows it to be widely employed in various industrial fields. Information provided by PolyPlastics.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Polyplastics-Duracon-M450-44M450S-Acetal-Co-polymer-POM-Standard-Super-high-flow-High-cycle.php](http://www.lookpolymers.com/polymer_Polyplastics-Duracon-M450-44M450S-Acetal-Co-polymer-POM-Standard-Super-high-flow-High-cycle.php)

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in <sup>3</sup>	ISO 1183

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	63.0 MPa	9140 psi	ISO 527-1, 2
Elongation at Break	27 %	27 %	ISO 527-1, 2
Tensile Modulus	2.80 GPa	406 ksi	ISO 527-1, 2
Flexural Strength	89.0 MPa	12900 psi	ISO 178
Flexural Modulus	2.55 GPa	370 ksi	ISO 178
Charpy Impact, Notched	0.500 J/cm <sup>2</sup>	2.38 ft-lb/in <sup>2</sup>	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear	110 µm/m-°C	61.1 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
CTE, linear, Transverse to Flow	110 µm/m-°C	61.1 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
Deflection Temperature at 1.8 MPa (264 psi)	100 °C	212 °F	ISO 75-1, 2
Flammability, UL94	HB	HB	

Electrical Properties	Metric	English	Comments
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Electrical Properties	Metric	English	Comments
Surface Resistance	1.00e+16 ohm	1.00e+16 ohm	IEC 60093
Dielectric Strength	19.0 kV/mm	483 kV/in	IEC 60243-1

## Contact Songhan Plastic Technology Co.,Ltd.

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