TECHNICAL DATA SHEET

Raw Material   Acetal (POM)

General Properties	Test Method	Unit	Value
Density	ISO 1183	g/cm^3	1.3
Water Absorption In Air 50% r.h.	ISO 62	%	0.2
Absorption 23-C In Water-Saturation	ISO 62:1999(modified)	%	0.65
Food Compliance	-	FDA/BfR	YES
UV Stability	-	-	-

Mechanical Properties			
Tensile Strength At Yield At Break	ISO 527-1/2:1993	N/mm^2	63
Elongation at Break	ISO 527-1/2:1993	%	31
Tensile Modulus Of Elasticity	ISO 527-1/2:1993	N/mm^2	2600
Impact Strength Charpy 7.5 J	ISO 604:2002	KJ/mm^2	NO BREAK
Notched Impact Strenght Charpy	ISO 180:2000	KJ/mm^2	6
Ball Indentation Hardness	-	N/mm^2	125
Rockwell Hardness	ISO 868:2003	Scale M	**88**
Coefficient Of Friction To Steel	-	-	0.35

Thermal Properties			
Melting Temperature	ISO 3146	°C	165
Thermal Conductivity	ISO 8301:1991	W/(km)	0.3
Deformation at temperature HDT	ISO 75	°C	95
Linear Expansion Coeficient 23-60Degrees	ISO 11359-2:1999	$10^{-6}K^{-1}$	120
Service Temperature, Long Term	Average	°C	100
Service Temperature, Short Term (MAX)	Average	°C	140
Minimum Operating Temperature	Average	°C	-50
Flammability	UL 94 (3-6mm thickness)	-	HB

Electrical Properties			
Dielectric Constant	IEC 60250-1969-01	-	3.8
Dissipation Factor Tan Δ at 1 MHz	IEC 60250:1969-01	-	0.005
Volume Resistivity	IEC 60093:1980-01	Ωm	1×10^{15}
Dielectric Strength	IEC 60243-1:1998-01	KV/mm	40

Applications:
- Crane Sheaves
- Carriage Wheels
- Outrigger Pads
- Heavy Load Bearings

Characteristics:
- Excellent Mechanical Strength
- High Chemical Resistance
- Excellent Wear Resistance
- Very good Sliding Properties

ROD
PLATE
TUBE