

Technical Data Sheet

Product Description:

Polyoxymethylene (POM), also known as Acetal, is a high-performance engineering thermoplastic known for its excellent mechanical properties, low friction, and high dimensional stability. It is widely used in automotive, industrial, and consumer applications.

General Properties:

- **Material Type:** Virgin Polyoxymethylene (POM)
 - **Color:** Natural (White to Off-White)
 - **Form:** Granules
 - **Density:** 1.41 g/cm³ (ISO 1183)
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Mechanical Properties:

Property	Test Method	Value
Tensile Strength	ISO 527	65 MPa
Flexural Strength	ISO 178	90 MPa
Flexural Modulus	ISO 178	2500 MPa
Izod Impact Strength (Notched)	ISO 180	8 kJ/m ²
Hardness (Rockwell)	ASTM D785	R120

Thermal Properties:

Property	Test Method	Value
Melting Point	DSC	165°C
Heat Deflection Temp. (HDT)	ISO 75	110°C @ 1.8 MPa
Coefficient of Thermal Expansion	ISO 11359	100 x 10 ⁻⁶ /°C
Flammability (UL Rating)	UL 94	HB

Flow Properties:

Melt Flow Rate (MFR): ~9 g/10 min (at 190°C, 2.16 kg load)

Electrical Properties:

Property	Test Method	Value
Dielectric Strength	IEC 60243	20 kV/mm
Volume Resistivity	IEC 60093	10^{14} Ω ·cm
Dielectric Constant (1 MHz)	IEC 60250	3.8

Processing Guidelines:

- **Drying Temperature:** 80-100°C for 2-3 hours
 - **Melt Temperature:** 190-230°C
 - **Mold Temperature:** 80-110°C
 - **Injection Pressure:** 50-120 MPa
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Applications:

- Gears and Bearings
 - Automotive Components
 - Conveyor Belts
 - Electrical Connectors
 - Medical and Industrial Equipment
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Storage & Handling:

Store in a cool, dry place away from direct sunlight and moisture. Ensure proper sealing of packaging to prevent contamination.

Safety & Compliance:

- RoHS & REACH Compliant

Disclaimer:

The above data are typical values and should not be used as product specifications. It is recommended to conduct appropriate tests to determine product suitability for specific applications.

For further information, please contact our technical support team.