

Key Features

- Dimensional stability
- Low moisture absorption
- Excellent machine-ability
- High fatigue endurance
- High strength and stiffness
- Superior impact and creep resistance
- Chemical resistance to fuels and solvents

Common Applications

- Pump and valve components
- Electronic components
- Gears
- Bearings
- Bushings
- Rollers
- Fittings
- Electrical insulator parts

Material Description

Delrin, also known as polyoxymethylene (POM) or acetal, is a high-performance engineering thermoplastic known for its excellent mechanical properties, low friction, and dimensional stability. It is commonly used in applications where high strength, stiffness, and wear resistance are required, such as gears, bearings, bushings, and automotive components. Delrin offers low moisture absorption and excellent chemical resistance, making it suitable for use in harsh environments. It is also known for its ease of machining and good fatigue resistance, making it a preferred material for precision components that require tight tolerances and long-term durability.

Mechanical Properties

Tensile Yield Strength	11,000 PSI
Hardness	Rockwell M91
Elongation at Break	≥ 50%

Physical Properties

Density	0.0513 lb/in ³ (1.42 g/cm ³)
Thermal Conductivity	0.31W/m.K
Modulus of Elasticity	363 – 464 KSI (2.5 – 3.2 GPa)
Melting Point	352°F (178 °C)

Technical Assistance

Our knowledgeable staff, supported by our in-house team of expert metallurgists and engineers, is ready to assist you with any technical inquiries.

InstaVoxel™ – On-Demand Manufacturing Expert

859 Willard Street Suite 400, Quincy MA 02169 USA
+1 (617) 302-1629 | info@instavoxel.com
www.instavoxel.com



InstaVoxel's quality control system is ISO-9001 certified, and all our partners hold relevant certifications.



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