POM Injection Molding

Acetal/Delrin

NEWAY PRECISION WORKS

NewayPrecision

www.newayprecision.com

Technical Data: POM (Acetal/Delrin)

Product Description

Define and Grades

Overview of Injection Molded POM
Injection-molded POM grades differ in properties. Delrin® offers general versatility, Delrin® AF combines POM with PTFE for reduced friction, Delrin® 570 is FDA-compliant, Hostaform® emphasizes engineering properties, and Celcon® specializes in low-friction applications, catering to various industrial needs.

Neway utilizes various grades of injection molded POM (Polyoxymethylene), including:
Delrin® (General-Purpose POM)
Delrin® AF (Filled POM with PTFE)
Delrin® 570 (FDA-Compliant POM)
Hostaform® (Engineering POM)
Celcon® (Low-Friction POM)

Features and Applications

Grade	Features	Applications
Delrin®	- Versatility - High stiffness - Excellent dimensional stability	Gears, bushings, fasteners, automotive components
Delrin® AF	- Low friction - Wear resistance - PTFE-filled	Bearings, bushings, conveyor systems, moving parts
Delrin® 570	- FDA-compliant - Good chemical resistance	Food processing equipment, medical devices, conveyor belts
Hostaform®	- Engineering properties - High strength	Automotive parts, precision gears, electrical components
Celcon®	- Low friction - High wear resistance	Low-friction bearings, conveyor components, pump parts

Physical and Mechanical

Property	Density	Tensile Strength	Tensile Elongation	Flexural Modulus	Flexural Strength	Izod Impact Strength	Heat Deflection Temp.	Shrinkage	Hardness
Units	(g/cm³)	(Mpa)	(%)	(MPa)	(MPa)	(J/m)	(℃)	(%)	(HRB)
Delrin®	1.42	85	50	3.2	135	105	150	2.5	120
Delrin® AF	1.47	78	20	3.1	125	43	130	2	110
Delrin® 570	1.41	75	60	2.8	103	80	90	3	110
Hostaform®	1.42	75	50	3.2	128	160	120	2.5	120
Celcon®	1.42	77	50	3.2	124	83	120	3	120

Note

The above data are reference material science data. This data reference is not binding and is not considered as authoritative test data. If your material requirements are extremely precise, please contact our material engineers.Tel | +86 18926788217 | Web | www.newayprecision.com | Contact Neway

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Benefits of Material Grades

Delrin® (General-Purpose POM)

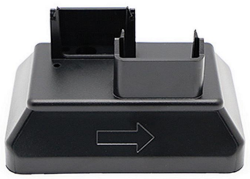
Delrin® is a versatile general-purpose POM known for its high stiffness, excellent dimensional stability, and ease of machining. With a 1.42 g/cm³ density, it boasts a tensile strength of up to 85 MPa and a flexural modulus of 3.2 GPa. This makes it ideal for gears, bushings, fasteners, and various automotive components. Its resistance to wear, chemicals, and moisture ensures durable performance.

Delrin® AF (Filled POM with PTFE)

Delrin® AF combines POM with PTFE to create a low-friction material that offers wear resistance and a coefficient of friction as low as 0.12. With a density of 1.47 g/cm³, it maintains a tensile strength of up to 78 MPa and a flexural modulus of 3.1 GPa. Bearings, bushings, conveyor systems, and moving parts benefit from reduced friction.

Delrin® 570 (FDA-Compliant POM)

Delrin® 570 is an FDA-compliant POM with a 1.41 g/cm³ density. It offers a tensile strength of up to 75 MPa and a flexural modulus of 2.8 GPa. Its suitability for food processing equipment, medical devices, and conveyor belts arises from its good chemical resistance and compliance with stringent FDA regulations.



Hostaform® (Engineering POM)

Hostaform® is an engineering-grade POM valued for its high strength, even at elevated temperatures. With a density of 1.42 g/cm³, it boasts a tensile strength of up to 75 MPa and a flexural modulus of 3.2 GPa. Automotive parts, precision gears, and electrical components benefit from their exceptional mechanical properties, including resistance to wear and fatigue.

Celcon® (Low-Friction POM)

Celcon® is a low-friction POM designed for applications requiring minimal wear and reduced friction. With a 1.42 g/cm³ density, it maintains a tensile strength of up to 77 MPa and a flexural modulus of 3.2 GPa. Its unique combination of low friction, high wear resistance, and dimensional stability makes it ideal for low-friction bearings, conveyor components, and pump parts.

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