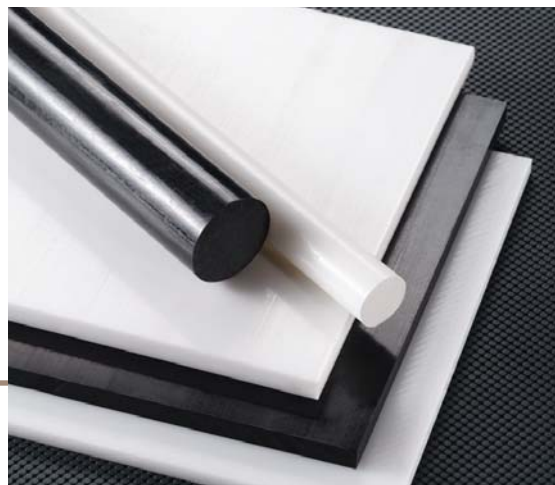


ACETAL (polyoxymethylene)

DELRIN® / SUSTARIN® / TECAFORM™



Acetal is a high strength, low friction engineering plastic that has excellent wear properties in both wet and dry environments. Good dimensional stability and ease of machining make acetal an outstanding choice for applications requiring complex machining to tight tolerances.

Homopolymer acetal (Delrin®) has superior room temperature strength, stiffness, and toughness. Copolymer acetal has superior performance in continuous high heat and hot water environments. Copolymer acetal also tends to have less porosity than homopolymer acetal.

Acetal is available in glass-filled grades that offer enhanced strength and stiffness. It is also available in a number of enhanced bearing and wear grades including: Delrin® AF, Delrin® AF blend, and TECAFORM™ HPV 13.



KEY CHARACTERISTICS:

- Strong and stiff
- Excellent machinability
- Good dimensional stability
- Low moisture absorption
- Excellent wear properties in both wet and dry environments
- Low friction
- Good chemical resistance
- Homopolymer and copolymer grades available
- FDA compliant grades available
- Enhanced bearing and wear grades available
- Glass-filled grades available
- Natural (white), black, and colors available

APPLICATIONS:

- Bearings and bushings
- Pump and valve parts
- Manifolds
- Gears
- Wear pads
- Jigs and fixtures
- Packaging machinery parts
- Food processing machinery parts
- Electrical components

ACETAL TYPICAL PROPERTIES:

	UNITS	ASTM TEST	HOMOPOLYMER ACETAL	COPOLYMER ACETAL	TECAFORM™ HPV 13 PTFE-FILLED ACETAL	20% GLASS FIBER FILLED HOMOPOLYMER ACETAL
Tensile strength	psi	D-638	10,000	9,800	6,800	8,500
Flexural modulus	psi	D-790	420,000	370,000	350,000	730,000
Izod impact (notched)	ft-lbs/in of notch	D-256	1.5	1.0	0.7	0.8
Heat deflection temperature @264 psi	°F	D-648	257	230	244	316
Maximum continuous service temperature in air	°F		185	195	185	185
Water absorption (immersion 24 hours)	%	D-570	0.25	0.20	0.22	0.25
Coefficient of linear thermal expansion	in/in/°Fx10 ⁻⁵	D-696	6.8	6.1	5.1	2.0-4.5
Coefficient of friction (dynamic)			0.20	0.21	0.12	0.35

Standard Sizes: SHEET: 24"x48" (0.25"-6.0" thick), 48"x96" (0.125"-2.0" thick), 48"x120" (0.125"-2.0" thick) **ROD:** diameter 0.25"-12.0" **TUBE:** OD 1.0"-4.0"
 Length, width, thickness, and diameter tolerances vary by size and by manufacturer • Custom sizes and colors available upon request • Many of our materials are available as films with thicknesses of 0.029" or less.
 Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.

Curbell Plastics has been supplying plastic sheet, rod, tube, films, adhesives, sealants, and prototyping materials for over 65 years

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