



Technical Specs				
Property	Units	ASTM	MD*	CD*
<b>Mechanical</b>				
Tensile strength (ultimate)	PSI	D1457-56T	1500	2400
Tensile elongation	%	D1457-56T	299	225
Compressive strength @ 0.2% yield stress	PSI	D695-54	1800	1200
Compressive modulus	PSI	D695-54	110,000	125,000
Flexural strength @ 0.2% yield stress	PSI	D740-61	NA	1400
Flexural modulus	PSI	D740-61	NA	149,000
Hardness (Shore D)		D1706-61	60	65
<b>Physical</b>				
Coeff. of thermal exp. @ 78° - 200°F	$\frac{\text{in} \times 10^{-5}}{\text{in} \times ^\circ\text{F}}$	D696-44	7.8	3.9
@ 78° - 300°F			8.4	4.0
@ 78° - 400°F			9.4	4.6
@ 78° - 500°F			11.0	5.5
Thermal conductivity	$\frac{\text{BTU-in}}{\text{hr.sq.ft } ^\circ\text{F}}$	Cenco Finch	2.67	
Specific gravity		D1457-62	2.24	
<b>Design Guides</b>				
Compressive creep (cold flow) def. at 78°F, 2000 PSI, 24hr				
Total deflection under load			6.4%	6.6%
Permanent deformation after removal of load			3.3%	3.4%
Deformation at 500°F, 600 PSI, 24 hours				
Total deflection under load			9.0%	20.5%
Permanent deformation after removal of load			4.3%	9.6%
Limiting PV @ 10 ft/min.			7500	
100 ft/min.			7500	
1000 ft/min.			10,000	
Wear factor $K \times 10^{-10} \frac{(\text{in.}^3\text{-min.})}{(\text{lb -ft -hr.})}$			8	
Coefficient of friction, 33.3 PSI			0.14	
Static			0.23	
Dynamic @ 150 FPM				

### Description

**Fluoroloy A** for low-cost general purpose bearings.

If the ultimate in load-carrying capacity and wear resistance is not required, **Fluoroloy A** can save you money while still offering excellent nonlubricated bearing performance, low-friction startups, good resistance to all chemicals except strong acids, and electrical non-conductivity.

**Fluoroloy A** also finds frequent use in lubricated sealing service for non-aqueous media. It is a proprietary composition consisting of a Teflon® TFE resin and inorganic reinforcing additives. Its basic properties are detailed below, together with guide design data for rubbing-contract service.

### Notes about Data

\* Forms fabricated from homogeneous material composition utilizing reinforcing aggregate bound by Teflon exhibit the phenomenon of heterogeneous property planes (e.g., planes parallel to the direction of compaction in contrast to the planes perpendicular to the direction of compaction). Since the types, sizes, and shapes of reinforcing aggregate largely effect the degree of orientation in a fabricated form the typical properties for both planes are listed.

In all forms of round bar the MD direction is the longitudinal axis of the bar. The CD direction is in the transverse axis. In all forms of sheet and plate the MD direction is in the thickness plane. The CD direction is in the plane perpendicular to the thickness.

Fluoroloy is a registered trademark of Saint-Gobain Performance Plastics.

### Forms Available

Shape	Standard Length	Outside Diameter	Tolerances
Extruded rods	6'	3/8" to 2"	Centerless ground
Molded rods	4" and 6"	2" to 12"	Molded rods and tubes have sufficient extra stock to allow for a clean up machine cut
Molded tubes	4" and 6"	2" to 28"	
Sheets and Plate are available in thicknesses from 3/32" through 2" and in sizes 12" x 12" and 24" x 24".			
Extruded tube to 2" OD is available on special order.			

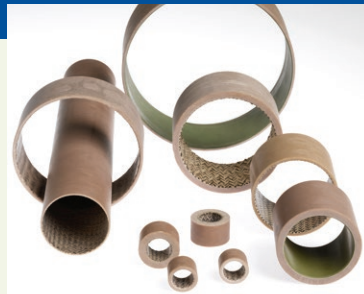
We're ready to put our engineering expertise to work for you from prototype to production.

Engineering | Custom Fabrication | Manufacturing



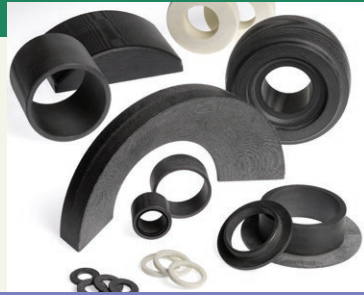
## CJ Composite

- Self-Lubricating
- Low weight | High Strength
- Chemical Resistance
- Direct replacement for Bronze



## Ultracomp<sup>®</sup>

- Self-Lubricating
- High Load | Low Speed
- 54,400 PSI Compressive Strength
- Exceptional Resistance to Vibration and Impact



## TriSteel<sup>™</sup>

- Self-Lubricating
- High Load | High Speed
- Metal Backed Bearing System
- 100% Lead Free



## Rulon<sup>®</sup>

- Self-Lubricating
- Low weight | High Strength
- Low Coefficient of Friction
- Chemically Resistant



## Enhanced Materials Division

- Plasma Surface Treatment
- Asymmetric & Symmetric Filtration Membranes
- Specialized Primers & Coatings
- Material ID & Selection



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