



## Ultraflon 500UAC

### Technical Specs

Property	ASTM Method	Unit	Value
Specific Gravity	D792	g/cc	0.978
Tensile Strength	D1708	psi	4,600
Elongation @ Break	D1708	%	600
Hardness	D1706	Shore D	67-68
Compressive Strength	D695	psi	4,800
Compressive Modulus	D695	psi	100,000
Flexural Modulus	D790	psi	175,000
Flexural Strength	D790	psi	5,000
Izod Impact Strength (notched)	D256	ft.lb/in. of notch	1.41
Coefficient of Thermal Exp (x 10-5)	D696	in/in/F	6 x 10-5
Continuous Service Temperature		°F	180
Heat Deflection temperature	D648	°F	175
Melting Point	D3418	°F	260
Water Absorption (24 hours) (Saturation)	D570	%	<0.01 <0.01

### Product Description

**Ultraflon 500UAC** is a copolymer used for both structural and self-lubricating bearing applications. Universally applied to wet or dry environments, it has good chemical resistance, low wear and zero maintenance. **Ultraflon 500UAC** is a cost effective material selection when lower ambient temperature ranges are involved. Very low water absorption makes it a good candidate for water pumps, valve stem bushings, dry sliding pads and similar medium-duty applications. Material meets FDA, USDA, NSF regulations and is available in black or white UV stabilized versions. Resin is injection moldable, extrudable and compression moldable.

For more information contact TriStar Plastics Corp. at 1-800-TRISTAR or via our website at [www.tstar.com](http://www.tstar.com).

**Continue to Page 2 for suggested start-up conditions for 500 UAC resin.**

## Suggested Start-up Conditions for 500UAC Resin

Condition	0.940-0.960 (g/cm 3)	0.910-0.930 (g/cm 3)	High flow (Low & High Density)	
Reciprocating Screw			Low - High	Low - High
Cylinder Temperature				
Rear °F (°C)	350 (176)	325 (163)	390 - 450	(200 - 230)
Center °F (°C)	400 (204)	350 (177)	430 - 500	(220 - 260)
Front °F (°C)	420 (215)	370 (188)	445 - 540	(230 - 280)
Nozzle °F (°C)	425 (218)	380 (193)	445 - 500	(230 - 260)
Hot Runner Temperature	400 - 500 (200 -260)			
Screw Rotation	Medium	Medium	Medium - Fast	Medium - Fast
Screw Back Pressure	0 - 50	0 - 50	0 - 50	0 - 50
Mold Temperature °F (°C)		40 - 68 (5-20)		
Raise to improve flow, surface finish. Lower for fast cycle, lower shrinkage, and good ejection.				
Injection Pressure (psi)	Maximum without flash (5,000 - 19,000), Adjust to fill cavity. Second stage pressure may be lower for holding.			
Fill rate.	May need to be slower for thick parts.		Maximum (use with accumulator)	

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## CJ Composite

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



## Ultracomp™

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



## TriSteel™

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



## Rulon®

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



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