

MATERIAL COMPARISON

FLUOROLOY® FLUOROPOLYMERS

Fluoroloy® Grades	Grade Color	A01 White	A08 Tan	A09 Gold	A12 Lt.Brown	A15 Dk.Gray	A16 Dk.Gray	A22 Tan	A30 Yellow
Physical	Specific Gravity	2.16	2.03	0.94	1.95	2.23	2.13	1.3	2.19
	Tensile Strength (psi)	4,000	3,000	4,500	2,000	3,400	3,000	13,780	2,700
	Tensile Modulus (psi)	56,000	55,000	77,000	-	64,000	56,000	580,150	62,000
	Elongation (%)	300	230	230	180	230	200	30	220
Mechanical	Compressive Strength ² (psi)	1,200	1,000	900	1,000	1,900	1,900	20,000	1,900
	Compressive Modulus (psi)	81,000	95,000	77,000	-	120,000	110,000	354,000	128,000
	Deformation Under Load ³ (%)	81,000	8.3	10	3	8.5	7	0.03	7.2
	Hardness Shore D	50-65	60	62	60	58	60	90	60
	Coefficient of friction	0.05-0.08	0.2	0.11	0.12	0.09	-	0.4	0.09
Thermal	L.C.o.T.E4 (n/ln/°F)	7.22x10 ⁻⁵	7.05x10 ⁻⁵	8.17x10 ⁻⁵	-	7.17x10 ⁻⁵	7.17x10 ⁻⁵	3.09x10 ⁻⁵	3.09x10 ⁻⁵
	Mold Dir. (n/ln/°F)								
	L.C.o.T.E4 (n/ln/°F)	8.44x10 ⁻⁵	7.36x10 ⁻⁵	11.8x10 ⁻⁵	-	5.19x10 ⁻⁵	7.00x10 ⁻⁵	4.36x10 ⁻⁵	3.09x10 ⁻⁵
	Cross Dir. (n/ln/°F)								
	Working Temp. Range (°F)	-450° to +600°F	-450° to +550°F	-450° to +180°F	-450° to +550°F	-450° to +600°F	-450° to +500°F	Up to +260°F	-450° to +600°F

- All testing was performed at room temperature unless otherwise specified. Fluoroloy® is a registered trademark of Omniseal Solutions™.
- Compression strength was measured at 1% strain.
- Deformation under load was tested at 2,000 psi for 24 hours.
- Linear Coefficient of Thermal Expansion - 78°F to 392°F.