

**TECHNICAL DATASHEET**

# Fluorolon 1000 Virgin PTFE

**Product Description:**

Fluorolon Virgin PTFE 1000 is a high molecular weight polymer, one of the most versatile plastic materials, and useful for an extensive range of products in which other materials won't work.

**Applications:** Primarily for seals, seats, bearings, and Insulators.

**Specifications:** Virgin PTFE ASTM-D4894, PTFE Filled ASTM D4745-06, FDA and Dairy Approved

**Product Properties:**

- High heat resistance
- High chemical resistance
- Low friction
- High dielectric properties
- Non-toxic
- Rated for Cryogenic applications

	Property	Method	Units	Specification
Physical	Color	White	--	White
	Specific Gravity	ASTM D792	gr/cc	2.14-2.20
	Water Absorption	ASTM D570	%	0.001
	Flammability	UL 94		V-0
Mechanical	Tensile Strength	ASTM D638	psi	2000
	Elongation	ASTM D638	%	200-300
	Hardness	ASTM D1706	Durometer D	50-60
	Compressive strength	ASTM D695-57	psi	1100
	Coefficient of Friction	ASTM D3702	Static	0.12
	Deformation 78 F@ 2000psi/24h	ASTM D621	%	14-16
Thermal	Coefficient of Thermal Expansion	ASTM D696	in/in/°F	5.5 x 10 <sup>-5</sup>
	Max Service Temp Continuous		*F	+500
	Minimum Service Temp Continuous		*F	-425
Electrical	Dielectric Constant	ASTM D150	-	2.00
	Dielectric Strength	ASTM D257	volts	1000

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# Fluorolon PTFE/Glass Alloy 1015

**Product Description:**

Fluorolon PTFE 1015 is a high molecular weight polymer reinforced with 15% glass fibers, providing enhanced mechanical properties. The glass increases compressive strength and reduces cold flow. Fluorolon 1015 is less abrasive than our 1025 grade.

**Applications:** Seals, valve Seats, Bushings, Insulators

**Product Properties:**

- Increased compressive strength
- Improved hardness
- Excellent insulating properties
- Chemical resistant
- Increased resistance to creep

	Property	Method	Units	Specification
Physical	Color	White	--	White
	Specific Gravity	ASTM D792	gr/cc	2.16-2.21
	Water Absorption	ASTM D570	%	<0.001
	Flammability	UL 94		V-0
Mechanical	Tensile Strength	ASTM D638	psi	2100
	Elongation	ASTM D638	%	150
	Hardness	ASTM D1706	Durometer D	58
	Compressive strength	ASTM D695-57	psi	1600
	Coefficient of Friction	ASTM D3702	F	0.21
	Deformation 78 F@ 2000psi/24h	ASTM D621	%	4-9
Thermal	Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.8 x 10 <sup>-5</sup>
	Max Service Temp Continuous		*F	+500
	Minimum Service Temp Continuous		*F	-425
Electrical	Dielectric Constant	ASTM D150	-	2.5
	Dielectric Strength	ASTM D257	volts	-

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# Fluorolon PTFE/Glass Alloy 1025

**Product Description:**

Fluorolon PTFE 1025 is a high molecular weight polymer reinforced with 25% glass fibers, providing enhanced mechanical properties. The glass increases compressive strength and reduces cold flow. The characteristics are: high heat resistance, high resistance to chemical agents, high dielectric properties, low friction, and non-toxic.

**Applications:** Seals, valve Seats, Bushings, Insulators

**Product Properties:**

- Increased compressive strength
- Improved hardness
- Excellent insulating properties
- Chemical resistant

	Property	Method	Units	Specification
Physical	Color	White	--	White
	Specific Gravity	ASTM D792	gr/cc	2.16-2.21
	Water Absorption	ASTM D570	%	<0.001
	Flammability	UL 94		V-0
Mechanical	Tensile Strength	ASTM D638	psi	2100
	Elongation	ASTM D638	%	150
	Hardness	ASTM D1706	Durometer D	58
	Compressive strength	ASTM D695-57	psi	1600
	Coefficient of Friction	ASTM D3702	F	0.21
	Deformation 78 F@ 2000psi/24h	ASTM D621	%	4-9
Thermal	Coefficient of Thermal Expansion	ASTM D696	in/in/°F	3.8 x 10 <sup>-5</sup> th
	Max Service Temp Continuous		*F	+500
	Minimum Service Temp Continuous		*F	-425
Electrical	Dielectric Constant	ASTM D150	-	2.5
	Dielectric Strength	ASTM D257	volts	-

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# Fluorolon PTFE Alloy 1034

**Product Description:**

Fluorolon 1034 is reinforced PTFE with 23% Carbon/2% Graphite. This additive improves the wear properties, reduce creep or extrusion. The material has the ability to run under dry or wet conditions

**Applications:** Highspeed shaft seals, low friction bearings, ball valve seats, bone dry compressor rings

Specifications: ASTM D 4745, ASTM D 3294, ASTM D 3295

**Product Properties:**

- Dimensional stability
- Improved creep resistance
- Higher PV Value
- Improved wear resistance
- Abrasion resistance
- Electrical conduction

	Property	Method	Units	Specification
Physical	Color	White	--	White
	Specific Gravity	ASTM D792	gr/cc	2.06
	Water Absorption	ASTM D570	%	0.007
	Flammability	UL 94		V-0
Mechanical	Tensile Strength	ASTM D638	psi	2300
	Elongation	ASTM D638	%	105
	Hardness	ASTM D1706	Durometer D	86
	Compressive strength	ASTM D695-57	psi	2500
	Coefficient of Friction	ASTM D3702	static	0.08
	Deformation 78 F@ 2000psi/24h	ASTM D621	%	12.6
	Flexural Strength	ASTM D790	psi	4300
	Flexural Modulus	ASTM D790	Psi	240,000
Thermal	Coefficient of Thermal Expansion	ASTM D696	in/in/°F	4.7 x 10 <sup>-6</sup> th
	Max Service Temp Continuous		*F	+500
	Minimum Service Temp Continuous		*F	-425