

Polytetrafluoroethylene (PTFE) is the worlds most widely used fluo-ropolymer due to its many outstanding physical properties. These properties include low static and dynamic coefficients of friction, chemical inertness and stability over a wide temperature range. Often times PTFE provides the only solution in terms of technical performance.

Virgin PTFE, however, has a low resistance to wear and is susceptible to deformation under certain compressive loads. Performance can be significantly improved with the addition of filler materials. Wear resistance and deformation under load can be greatly enhanced by adding fillers such as glass and bronze. Fillers can also positively affect the thermal expansion, thermal conductivity and electrical properties of virgin PTFE. During our 28 years we have worked with over 100 different PTFE/filler combinations, all designed to satisfy specific customer requirements.

The engineering staff at T-LON® works on a daily basis to develop unique material compounds that provide sealing solutions for demanding applications. Our experienced staff is able to take a project from inception through installation completing the design, prototyping and production along the way. Our goal is to maximize the creative process in a timely manner and do our very best during every step of your project.

We invite you to challenge us to develop a proprietary PTFE material for your application.

Also offered is a wide range of non PTFE thermoplastic materials. These materials include but are not limited to PEEK, UHMW, NYLON and ACETAL.

The tables found in this section describe properties of the most frequently used T-LON® compounds. Information concerning other PTFE blends of material is available upon request.





T-LON Material Specification Tables

Properties Material	Color	Tensile Strength PSI <small>ASTM D4894/D4745</small>	Elongation % <small>ASTM D4894/D4745</small>	Specific Gravity <small>ASTM D4894/D4745</small>	Hardness Shore D <small>ASTM D2240</small>	Wear Resistance	Extrusion Resistance	NSF/FDA Acceptance	Dynamic Surface Abrasion (Relative)	Maximum Typical Use Temperature (F)	Typical Applications
T-Lon-01 100% VIRGIN PTFE	White	5000	350	2.16	54	+	+	Yes	Very Low	550	Food Processing FDA / NSF Excellent Chemical Resistance
T-Lon-02 Pigmented PTFE	Aqua	4750	325	2.16	55	++	++	Yes	Low	550	Improved Wear Virgin PTFE
T-Lon-03 15% Glass Filled PTFE	Gold	3200	250	2.20	58	+++	+++	No	Moderate	550	High Wear Reciprocating Seal Rotary Seal
T-Lon-06 15% Glass Filled PTFE	White	3200	250	2.20	58	+++	+++	No	Moderate	550	High Wear Reciprocating Seal Rotary Seal
T-Lon-09 25% Glass Filled PTFE	Blue	2600	230	2.22	60	+++	+++	No	High	550	High Wear Reciprocating Seal Rotary Seal
T-Lon-11 25% Glass Filled PTFE	White	2600	230	2.22	60	+++	+++	No	High	550	High Wear Reciprocating Seal Rotary Seal
T-Lon-15 25% Carbon Graphite Filled PTFE	Black	2200	130	2.03	63	++++	++++	No	Moderate	550	Elevated Temp High Wear Reciprocating Seal Rotary Seal
T-Lon-16 15% Graphite Filled PTFE	Grey	2600	180	2.13	58	+++	++	No	Very Low	550	Low Hardness Mating Surface Applications
T-Lon-17 10% Graphite Filled PTFE	Grey	2900	250	2.14	57	+++	++	No	Very Low	550	Low Hardness Mating Surface Applications
T-Lon-19 5% Glass 5% Moly Filled PTFE	Black	3800	300	2.24	58	+++	+++	No	Low	550	High Wear Reciprocating Seal Rotary Seal
T-Lon-21 40% Bronze Filled PTFE	Bronze	3650	265	3.06	60	++++	+++	No	Low	550	Elevated Temp Reciprocating Seal Rotary Seal

Note: These data are shown for information and comparison, and should not be used for design purposes. Materials found in this section describe properties of the most frequently used T-LON compounds. Information concerning other PTFE blends of material is available upon request.