

DuPont™ Krytox®

performance lubricants

Linear Oils and Greases

Krytox® linear perfluoropolyethers (PFPEs) provide exceptional low volatility characteristics for longer lubricant life. The base oils have high viscosity indexes to provide effective lubrication over a wider temperature range. They have the excellent chemical and thermal stability of all Krytox® products and are nonflammable and safe for use in oxygen and other harsh chemical environments. Six base oil grades are available to meet the needs of all major applications. The standard products are called Krytox® L-(grade number) oil or grease. Greases are also available with a choice of two anticorrosion/antiwear

additives, including our patented XP soluble additive. The greases are thickened with polytetrafluoroethylene (PTFE), which gives a smooth buttery white colored NLGI grade 2 grease.

Krytox® L is compatible with most materials including the most commonly used plastics and elastomers. It is safe for use around fuels and oxidizers and has excellent load carrying capacity. It is designed for performance in extreme vacuum or temperature conditions.

Typical Properties of Krytox® L

	L-15	L-32	L-65	L-100	L-150	L-220
Oils	L-15	L-32	L-65	L-100	L-150	L-220
Standard Grease	L-15 G	L-32 G	L-65 G	L-100 G	L-150 G	L-220 G
Anticorrosion Grease	L-15 AG	L-32 AG	L-65 AG	L-100 AG	L-150 AG	L-220 AG
Soluble Anticorrosion Grease	L-15 XP	L-32 XP	L-65 XP	L-100 XP	L-150 XP	L-220 XP
Oil Viscosity, 20°C (68°F), cSt	31	70	150	233	350	540
Oil Viscosity, 40°C (104°F), cSt	15	32	65	99.9	150	220
Oil Viscosity, 100°C (212°F), cSt	3.7	7.0	12	18.5	26	40
Oil Viscosity Index	145	181	193	206	212	228
Molecular Weight	2500	3500	5000	7000	8200	10500
Vapor Pressure (estimated)						
Torr at 20°C (68°F)	1 x 10 ⁻⁶	9 x 10 ⁻⁷	1 x 10 ⁻⁷	1.5 x 10 ⁻⁸	4 x 10 ⁻¹⁰	6 x 10 ⁻¹¹
Torr at 200°C (392°F)	1 x 10 ⁻¹	4 x 10 ⁻²	7 x 10 ⁻²	3 x 10 ⁻³	2 x 10 ⁻⁴	4 x 10 ⁻⁵
Useful Temperature Range, °C (°F)	-75–150 (-103–302)	-70–180 (-94–356)	-69–220 (-92–428)	-67–290 (-89–554)	-60–315 (-76–599)	-60–315 (-76–599)
Oil Pour Point, °C (°F)	<-75 (-103)	<-70 (-94)	-69 (-92)	-67 (-89)	-60 (-76)	-60 (-76)
Oil Density, g/mL at 24°C (75°F)	1.84	1.85	1.85	1.86	1.87	1.87
Oil Volatility, % in 22 hr (D972)						
121°C (250°F)	10	5				
204°C (400°F)		15	5	2.5		
260°C (500°F)			12	8	3	1.5

Predicted typical properties; not for specifications

Krytox® PFPE Oils and Greases

Krytox® PFPE oils are clear colorless fluorinated synthetic oils that are nonreactive, nonflammable, safe in chemical and oxygen service, and are long lasting. Krytox® is a perfluoropolyether (PFPE)—also called perfluoroalkylether (PFAE) or perfluoropolyalkylether (PFPAE) oil.

Krytox® L is a proprietary formulation based primarily on a perfluoropropylpolyether with the same excellent thermal properties of Krytox® and much improved temperature viscosity performance.

Surfaces to be lubricated should be thoroughly cleaned before Krytox® is applied to remove organic rust inhibitors that could inhibit proper lubrication. These lubricants are extremely inert and will keep their lubricating properties even after long periods of storage.

Typical applications include all types of bearings, gears, valves, and O-rings and other plastic components.

For more information or technical assistance, call:
or visit us on the Web:

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<http://www.krytox.com>

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