

DuPont™ Krytox®

WHEN RELIABILITY IS CRITICAL,
DUPONT™ KRYTOX® IS THE RIGHT CHOICE

DuPont, the worldwide leader and innovator for performance lubricants, welcomes you to explore our diverse portfolio of oils and greases.



When you're choosing a lubricant for critical applications, there's no room for doubt. Maximum durability isn't just desired, it's required. That's when you need the most superior lubricant formulated from advanced fluoropolymer technology.

The Krytox® Product Line Delivers Reliability and Performance

When compared to conventional mineral oil or synthetic lubricants, only Krytox® oils and greases combine stability, high-temperature performance, nonflammability, and chemical inertness with outstanding lubrication under a variety of conditions.

Environmental Safety

Using DuPont™ Krytox® oils and greases reduces or eliminates the need for hydrocarbon lubricants and their potential environmental impact. They last significantly longer, so less lubricant is needed. They are completely nontoxic and do not release volatile organic compounds into the atmosphere.

Cost-effectiveness

Krytox® lubricants are cost-effective across a broad range of applications because of their superior protection and useful life relative to traditional hydrocarbons, silicones and other lubricants. This allows equipment manufacturers to extend warranties and manufacturing plants to reduce costly downtime and maintenance due to component failure. Krytox® oils and greases are priced very competitively versus fluorosilicones and CTFE lubricants.

A Wide Range of Applications

Krytox® was developed to provide the best protection for bearings, valves and other components in extreme-temperature service, up to 343°C (650°F). They are cost-effective across a wide range of applications because of their long life. A few of the many current uses include:

Industrial. All bearings, valves and seals, corrugator and paper machine bearings, aluminum can manufacturing bearings, vacuum sputtering machines, welding machines, gear oil, linear bearing lubricant, high temperature fans, clean rooms, chlorine service, acid service, textile equipment, tenter frames, high speed motors, instrument bearings, sealed for life motors, conveyor system in glass and aluminum plants, textile calendar roll bearings, brick kiln car bearings, and film blowing machines, lubricant for valve stem packing, relief valve lubricant, O-ring lubricant, steam turbine control valves, and low emissions valve stem packing lubricant.

Aviation. Fuel resistant grease, oxygen-compatible grease, ventilation fan bearing grease, cruise missile rear main bearing lubricant, starter bearing grease, emergency generator bearing grease, missile launch platform gear lubricant, space shuttle lubricant, and sealant,

Pumps. Vacuum pump fluid for corrosive and hazardous service, bearing grease for chemical pumps, O-ring lubricant, and barrier fluid between double mechanical seals.

Nuclear. Submerged sump pump bearings, containment cooling fans, snubbers, and control rod drive mechanism fan motors.



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Miscellaneous. Anti-seize lubricant, bolt thread lubricant, water purifier lubricant, self contained breathing apparatus lubricant, cryogenic lubricant, vacuum system sealant, drive chains, hydraulic fluids, instrument barrier fluids, heat transfer fluids, geothermal system grease, mold release agent, fishing reel grease, industrial toast making oven conveyor bearings, windmill gearboxes, glove curing conveyor, and most any moving or sliding surface.

General Properties

With over 200 years of trusted DuPont experience, Krytox® performance lubricants are the products of choice for applications where complete nonflammability, oxygen compatibility, and resistance to aggressive chemicals are requirements. Krytox® oils and greases offer a unique combination of properties that provide exceptional, yet cost-effective solutions to your most difficult lubrication problems. Krytox® provides superior protection and load-carrying ability under the most severe conditions.

Nonflammability. All Krytox® oils and greases are completely nonflammable. They contain only carbon, oxygen, and fluorine. They will not burn or support combustion, even in 100% liquid or gaseous oxygen.

Chemical Inertness. All Krytox® oils and greases are chemically inert to virtually all chemicals used in manufacturing operations, including oxygen, chlorine, sulfuric acid, and nitric acid, to name a few. They are insoluble in most solvents except highly fluorinated ones. They are resistant to water and steam.

Thermal and Oxidative Stability. The initial decomposition point of Krytox® is 355°C (671°F), far above standard lubricants. More importantly, gaseous decomposition products are given off and no sludge or gummy deposits are formed. In most applications, Krytox® has proven serviceable at continuous temperatures of 288°C (550°F) and intermittent temperatures of 427°C (800°F).

Compatibility with Elastomers and Plastics.

Krytox® is compatible with all elastomeric seal materials and engineering plastics. The limiting factor would be the thermal stability of the material you are lubricating.

Compatibility with Metals. Due to their low surface tension, Krytox® will easily wet metallic surfaces. Since they are chemically inert, they have no effect on metals up to 288°C (550°F). Many metals can be used above this temperature (call for a detailed listing or visit our website).

Standard Industrial Krytox® Grades*

Typical Properties	GPL 205	GPL 2A5	GPL 105	GPL 103
Anti-Corrosion Additive	No	Yes	No	No
Anti-Rust Rating ASTM D-1743	NA	pass	NA	NA
Appearance	White, Creamy Consistency	White, Creamy Consistency	Clear Oil	Clear Oil
Estimated useful Temperature Range		-36°C [-33°F] to 204°C [400°F]		-60/154°C -76/31°F
Base Oil Viscosity, cSt	20°C [68°F] 40°C [104°F] 100°C [212°F] 204°C [400°F]	550 160 18 3		80 30 5 -
Max. Oil Volatility % in 22 hours	66°C [150°F] 121°C [250°F] 204°C [400°F]	1 2 10		1 7 -
Specific Gravity at 0°C [0°F] g/cm ³	1.98	1.98	1.94	1.92

*We have an extensive selection of oils and greases to meet your needs effective up to temperatures as high as 400°C (752°F). To learn more about our complete family of oils, greases and dry film lubricants, please browse our website or call us at the number noted below. When calling, please ask about our new low-cost, ambient temperature greases and our extra-high temperature (XHT) greases! Registered users are able to access our full literature library.

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

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