

# DuPont™ Krytox® XHT-S and XHT-SX

## Performance Lubricants

This grease is a special high temperature grease with low oil evaporation that provides long bearing life and is compatible with all elastomers and plastics. It has excellent lubrication over a broad temperature range but is designed to work best at temperatures over 200°C (400°F). It is nonflammable, oxygen compatible, and chemically inert. Krytox® provides extended lubrication intervals and longer equipment life.

**Typical Properties of XHT-S Series PFPE Grease**

	XHT-S	XHT-SX
Estimated Useful Range		
°C	-20/300	-10/300
°F	-4/572	14/572
Base Oil Viscosity, cSt		
20°C (68°F)	1,830	2,560
40°C (104°F)	500	738
100°C (212°F)	47	65
Oil Viscosity Index	149	158
Oil Pour Point		
°C	-25	-15
°F	-13	5
Vapor Pressure		
20°C (68°F) (Knudsen)	$\leq 1 \times 10^{-9}$	$\leq 3 \times 10^{-14}$
100°C (212°F) (Knudsen)	$\leq 8 \times 10^{-7}$	$\leq 1 \times 10^{-9}$
200°C (392°F) (Knudsen)	$\leq 1 \times 10^{-4}$	$\leq 2 \times 10^{-6}$
Maximum Volatility in 22 hr, %		
204°C (400°F)	<1	<0.75
Appearance	White, creamy consistency	White, creamy consistency
Specific Gravity, 0°C (32°F)	1.99	1.99

This grease is an extension of the 240 series and GPL 20X series but is designed to give higher performance in the 204–302°C (400–575°F) ranges. It should be used below 320°C (608°F), where the PTFE thickener could begin to melt. The base oil is an extremely viscous oil that provides good viscosity and lower evaporation at high temperatures. There are no additives in the grease, so it is used where there is a potential for interaction between process chemicals and grease additives.

Typical applications include: paint plant conveyor bearings, corrugator and paper machine bearings, aluminum can manufacturing bearings, welding machines, high temperature fans, textile equipment, tenter frames, high temperature ovens, conveyor systems in glass and aluminum plants, textile calendar roll bearings, brick kiln car bearings, valve lubrication, ventilation fan bearing grease, rod mills, and valves.

Applications for these lubricants are generally of a critical nature where temperatures reach extremes that conventional lubricants cannot handle, and they are expected to be durable in the most aggressive environments. Where failure of components is not an option whether because of durability, warranty, safety, loss of productivity or down time, Krytox® is the lubricant of choice in a wide range of industries and applications.

Grease is made to a standard NLGI grade 2. PTFE is the standard thickener.

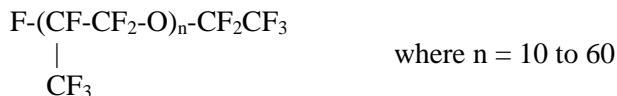
XHT-S was also called GPL 207-500 when it was first developed.



*The miracles of science™*

## 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) with the following chemical structure:



The polymer chain is completely saturated and contains only carbon, oxygen, and fluorine. On a weight basis, a typical Krytox® oil contains 21.6% carbon, 9.4% oxygen, and 69.0% fluorine.

### *Compatibility with Metals*

Because of their low surface tensions, Krytox® lubricants easily wet metallic surfaces. Krytox® lubricants are chemically inert and, therefore, have no adverse effect on metals when the temperature is below 288°C (550°F). Above 288°C (550°F), many alloy steels, stainless steels, and other metals such as aluminum alloy, titanium alloy, nickel alloy, and cobalt alloy can be used with Krytox®.

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**For more information or technical assistance, call: (800) 424-7502**  
**or visit us on the Web: <http://www.krytox.com>**

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Or call the Krytox® hotline in the **United States** at (800) 424-7502, E-mail: [krytox@usa.dupont.com](mailto:krytox@usa.dupont.com)

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