Product Information

Krytox™ oils are high performance, extreme pressure, water-resistant oils for your most demanding needs. They provide stable performance in temperature extremes and are designed to reduce friction and wear, while extending equipment life in severe duty applications. They are extremely resistant to water washout for bearings and other equipment. Their wide temperature range allows them to be used in both high and low temperature applications.

The superior film-forming capability of Krytox™ lubricants provides a thicker oil layer and reduces wear. The non-oxidizing nature of the molecule makes the oils last longer. The oils don't carbonize and gum up as they age to cause catastrophic failure. They have superior extreme pressure properties and excellent adhesion, so they stand up to all conditions.

This oil has been blended for use in cold to ambient conditions. If the application is to be run continuously at high temperatures, the use of standard Krytox™ oil is recommended. The Krytox™ GBO oils have no additives and are recommended for use where an inert, nonflammable lubricant is needed.

Krytox™ lubricants are commonly used in aerospace, automotive, industrial, and semiconductor applications, as well as solving many other routine lubrication problems.

Typical Applications

Applications for these lubricants are generally of a critical nature, where temperatures are reaching extremes for conventional lubricants. They are durable in the most aggressive environments and are now often considered an integral part of the design. Where failure of components is not an option, whether because of durability, warranty, safety, loss of productivity, or downtime, Krytox™ is the lubricant of choice in a wide range of industries and applications.

Krytox™ oils and greases are silicone-free. They do not contain any VOC materials or chlorine and are not hazardous to the atmosphere or ozone layer. They are biologically and environmentally inert.

Compatibility

While Krytox™ oils are non-reactive, they have different chemistries than standard lubricants and should not be mixed with other non-PFPE lubricants.

These lubricants are inert and will not react with any materials they may come in contact with. The polymeric nature of these products is extremely resistant to moisture, so it stays in place during cleaning. Cleaners and disinfectants, both acidic and caustic types, do not affect them. Steam and high temperatures will not damage them. They do not damage plastic or elastomer seals or cause corrosion to metals. They are nonflammable and are safe for use in oxygen service.

<table>
<thead>
<tr>
<th>Typical Properties</th>
<th>Krytox™ GBO 14</th>
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<tbody>
<tr>
<td>Base Oil Viscosity, 40 °C (104 °F), cSt</td>
<td>50</td>
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<tr>
<td>Volatility, 24 hr, 100 °C (212 °F), %</td>
<td>2.1</td>
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<tr>
<td>Base Oil Density, g/mL</td>
<td>1.9</td>
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*These values are typical properties and not product specifications.
Cleaning Systems Before Use
Before using Krytox™, all old lubricants must be fully removed from the pump or equipment. New bearings should be inspected for damage and cleanliness before use. New unlubricated bearings often have rust preventive oils in them to prevent damage while they are in storage before use. These greases or preservative oils need to be removed when using Krytox™ as a lubricant. Failure to do so could result in reduced bearing life. The preservatives coat the metal surface to prevent rusting, so they or oil left in the system can contaminate the Krytox™ and also prevent the Krytox™ from adhering—causing it to be thrown off by the action of the bearing or pump. They also can oxidize, harden, and create debris that will contaminate the Krytox™.

Storage and Shelf Life
Krytox™ grease and oil lubricants have an indefinite shelf life if unopened and stored in a clean dry location.