

Performance of Synthetic Lubricants Compared to Mineral Oils

Properties	Mineral Oil (Paraffinic)	Synthetics						
		Synthesized Hydrocarbons		Organic Esters		Polyglycol	Phosphate Ester	Silicone Fluid
		Polyalphaolefin (PAO)	Dialkylated Benzene	Dibasic Acid Ester	Polyol Ester			
Viscosity-Temperature	Fair	Good	Fair	Good	Good	Very Good	Poor	Excellent
Low Temperature	Poor	Good	Good	Good	Good	Good	Fair	Good
High Temperature Oxidation Stability with Inhibitor	Fair	Very Good	Good	Good	Excellent	Good	Fair	Good
Compatibility with Mineral Oil	Excellent	Excellent	Excellent	Good	Fair	Poor	Poor	Poor
Low Volatility	Fair	Excellent	Good	Excellent	Excellent	Good	Good	Good
Compatibility with Most Paints and Finishes	Excellent	Excellent	Excellent	Poor	Poor	Good	Poor	Very Good
Hydrolytic Stability	Excellent	Excellent	Excellent	Fair	Fair	Very Good	Fair	Good
Antirust with Inhibitor	Excellent	Excellent	Excellent	Fair	Fair	Good	Fair	Good
Additive Solubility	Excellent	Good	Excellent	Very Good	Very Good	Fair	Good	Poor
Seal Swell Performance NBR*	Excellent	Excellent	Fair	Fair	Fair	Good	Fair	Excellent

* Acrylonitrile-Buladiene Rubber