

Base oil types

The properties of a grease are dependant upon four major factors, one of which is the base oil type. The base oil generally constitutes >70% of a greases composition. A knowledge of the base oil type of a grease will give an overview of its performance and cost.

Base oil types	
Mineral Oils	paraffinic, naphthenic, mixed base
Other Natural Oils	rapeseed, castor, lard
Synthetic Oils	Esters (di-esters, poly-esters), Polyglycols, SHC's (poly-alpha-olefins), Silicones, Fluorinated-alkyl-ethers, poly-(phenyl-)ethers
<i>Note: Other Natural Oils are sometimes referred to as glycerides.</i>	

Compatibility chart for base oil types

	Mineral oil	Ester oil	Polyglycol	Silicone: methyl	Silicone: phenyl	Polyphenylether
Mineral oil	+	+	-	-	+	0
Ester oil	+	+	0	-	+	0
Polyglycol	-	0	+	-	-	-
Silicone: methyl	-	-	-	+	+	-
Silicone: phenyl	+	+	-	+	+	+
Polyphenylether	0	0	-	-	+	+
+ = Compatible - = Incompatible 0 = Limited						

