

Mobil SHC[™] 600 Series

Mobil Industrial, United States

View the Mobil SHC 600 Series (<https://www.mobil.com/industrial/Lubricants/Product-Series/Mobil-SHC-600-Series>)
Exceptional Performance Gear and Bearing Oils

Product Description

Mobil SHC[™] 600 Series lubricants are exceptional performance gear and bearing oils designed to provide outstanding service in terms of equipment protection, oil life and problem-free operation helping to enable increased customer productivity. These scientifically engineered oils are formulated using the latest proprietary and patent pending Mobil SHC technology to provide outstanding and balanced performance in demanding applications at high and low temperatures. Mobil SHC 600 products feature excellent low temperature properties, as well as improved air release performance in the lower viscosity grades. These products are resistant to mechanical shear, even in heavily loaded gear and high shear bearing applications, so that there is virtually no loss of viscosity.

Mobil SHC 600 Series products have low traction coefficients relative to mineral oils which derive from the molecular structure of the base stocks used. This results in low fluid friction in the load zone of non-conforming surfaces such as gears and rolling contact bearings. Low fluid friction produces lower operating temperatures and improved gear efficiency, which translates into reduced power consumption. Mobil SHC 600 Series products have demonstrated up to 3.6% improvement in energy efficiency in controlled laboratory testing(*). Mobil SHC 600 Series formulation also provides excellent resistance to oxidation and deposit formation at elevated temperatures, as well as exceptional resistance to rusting and corrosion, antiwear, demulsibility, foam control and air release properties, and multi-metal compatibility. Mobil SHC 600 Series oils maintain good compatibility with seals and other materials used in equipment normally lubricated with mineral oils.

Mobil SHC 600 Series lubricants are suitable for use in a wide range of equipment, not only as high temperature problem solvers, but also because of the other benefits they offer.



(*). Energy efficiency relates solely to the performance of Mobil SHC 600 when compared to conventional (mineral) reference oils of the same viscosity grade in circulating and gear applications. The technology used allows up to 3.6% efficiency compared to the reference when tested in a worm gearbox under controlled conditions. Efficiency improvements will vary based on operating conditions and application.

Features and Benefits

The Mobil SHC brand of lubricants are recognized and appreciated around the world for their innovation and outstanding performance. These synthetic products, molecularly designed and pioneered by our research scientists, embody the continuing commitment to using advanced technology to provide outstanding lubricant products. The development of Mobil SHC 600 Series was preceded by close contacts between our scientists and application specialists with key Original Equipment Manufacturers (OEMs) to ensure that the products provide exceptional performance in the continually evolving industrial equipment designs.

Our work with key equipment builders has helped confirm the results from our own laboratory and rig tests showing the exceptional performance of Mobil SHC 600 Series lubricants. Not least among the benefits, shown in work with OEMs, is the potential for energy efficiency improvements up to 3.6% relative to mineral oils (*). These benefits are particularly evident in equipment with a high level of mechanical losses, such as high ratio worm gears.

To develop the latest Mobil SHC technology for Mobil SHC 600 Series oils, our product formulation scientists chose select base oils because of their exceptional thermal/oxidative resistance potential and combined them with a balanced additive system, which complements the inherent benefits of the

Mobil SHC 600 Series has the following builder approvals:	624	625	626	627	629	630	632	634	636	639
Fives Cincinnati			P-63 P-80	P-76	P-77				P-34	P-78
SIEMENS AG Flender gear units, T 7300, Table A-c, Flender Code No.					A36	A35	A34	A33	A32	A31
SEW Eurodrive: SEW IG CLP HC SEW SG CLP HC	32 32		68 68		150 150	220 220	320	460 460	680	1000

Typical Properties

Mobil SHC 600 Series	624	625	626	627	629	630	632	634	636	639
ISO Viscosity Grade	32	46	68	100	150	220	320	460	680	1000
Viscosity, ASTM D 445										
cSt @ 40°C	32	46	68	100	150	220	320	460	680	1000
cSt @ 100°C	6.3	8.5	11.6	15.3	21.1	28.5	38.5	50.7	69.0	98.8
Viscosity Index, ASTM D2272	148	161	165	162	166	169	172	174	181	184
Pour Point, °C, ASTM D5950	-57	-54	-51	-45	-39	-36	-33	-30	-30	-27
Flash Point, °C, ASTM D 92	236	225	225	235	220	220	225	228	225	222
Density @ 15°C (60°F) (g/cc) ASTM D4052	0.85	0.85	0.86	0.86	0.86	0.87	0.87	0.87	0.87	0.87
Appearance, visual	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange	Orange
TOST, ASTM D 943 mod, hours	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+
RPVOT, ASTM D 2272, minutes	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Rust protection, ASTM D665B, Synthetic Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Water Separability, ASTM D1401,Min. to 37 ml water @ 54°C	10	15	15	-	-	-	-	-	-	-
Water Separability, ASTM D1401,Min. to 37 ml water @ 82°C	-	-	-	15	20	20	20	20	20	25
Copper Corrosion, ASTM D130, 24 hrs @ 121°C	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B
Foam Test, ASTM D892, Seq I,II,IIITendency / Stability, ml/ml	15/0, 20/0, 25/0	10/0, 30/0, 10/0	10/0, 20/0, 10/0	0/0, 10/0, 0/0	0/0, 0/0,0/0	0/0, 10/0, 0/0	0/0,0/0,0/0	0/0,0/0,0/0	0/0,0/0,0/0	0/0, 0/0, 0/0
FZG gear scuffing test, A/8.3/90, ISO 14635-1 (mod), Failure Stage	11	12	12	12	13	13+	13+	13+	13+	13+
FAG FE8 Bearing Wear Test 7.5/80-80 ((DIN 51819-3) Roller Wear (mg)	-	-	-	2	2	2	2	2	2	2

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

All products may not be available locally.

Note for Canadian users: Mobil SHC 600 Series is not controlled under Canadian WHMIS legislation.

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