

Mobil SHC[®] 600 Series

Synthetic Bearing and Gear Oils

Description

Mobil SHC 600 Series oils are formulated using a Mobil unique and proprietary synthetic base oil technology and additives that enhance oxidation stability, improve foam control, maintain superior stability in the presence of water, and provide protection against rust, corrosion, and wear. Synthetic base oils provide longer oil life over conventional mineral oils. Mobil SHC 600 Series oils have a naturally high viscosity index (VI) compared to mineral oils, providing lower viscosity at lower temperatures and higher viscosity at higher temperatures. This high VI allows the oil to flow at cold temperatures so equipment will start. It also means viscosity will be maintained at high temperatures to provide wear protection.

The low traction coefficient and high viscosity index of the Mobil SHC 600 Series combine to reduce power consumption substantially. Lower equipment operating temperatures can mean that friction has been reduced and therefore, less power is consumed. This can result in extended equipment life and allow for more economical equipment design and extended lubricant life.

Application

The Mobil SHC 600 Series oils are recommended for industrial bearings and gears over the widest range of operating temperatures. They are particularly effective where high oil temperatures result in short oil life and high maintenance costs for parts replacement, system cleaning, and lubricant changes.

Mobil SHC 627, 629 and 630 are suitable for Oil Flooded Rotary Screw Compressors compressing natural gas, field gathering gas, CO₂ and other process gasses used in the natural gas industry.

These wax-free, high-viscosity-index oils also provide unequaled lubrication of bearings and gears in extreme low-temperature applications. The Mobil SHC 600 Series oils are compatible with mineral oils and with the following seal materials: fluorocarbon, polyacrylate, polyurethane ether, silicone, ethylene/acrylic, chlorinated polyethylene, polysulfide, and some Buna N. There is the potential for substantial variations in the elastomers being used today. For best results, consult your equipment supplier, seal supplier, or your representative to verify compatibility.

When changing to the Mobil SHC 600 Series, the system should be cleaned and flushed thoroughly to achieve the maximum performance benefits of the product.

Advantages

Mobil SHC 600 Series will provide the following advantages over mineral oils:

- Better high-temperature oxidation stability
- Improved low-temperature fluidity
- Lower operating temperatures
- Extended lubricant life
- Reduced power consumption
- Improved foam control
- Superior stability in presence of water (hydrolytic stability and demulsibility)
- Outstanding rust and corrosion protection



Typical Properties

Physical characteristics listed in the table are typical and may vary slightly.

Mobil SHC	624	625	626	627	629	630	632	634	636	639
ISO Viscosity Grade	32	46	68	100	150	220	320	460	680	1000
Specific Gravity	0.849	0.853	0.858	0.861	0.866	0.866	0.867	0.867	0.867	0.869
Gravity, API	35.0	34.4	33.16	33.3	32.4	31.9	31.7	31.4	31.7	31.3
Pour Point, °C (°F) max	-54 (-65)	-54 (-65)	-54 (-65)	-45 (-49)	-45 (-49)	-45 (-49)	-42 (-44)	-42 (-44)	-42 (-44)	-15 (5)
Flash Point (COC), °C (°F) min	240 (464)	245(273)	245 (473)	245 (473)	245 (473)	250 (482)	250 (482)	250 (482)	250 (482)	250 (482)
Viscosity, cSt at 40°C	32.4	48.0	69.9	99.1	142.8	217.7	325.8	436.4	663.8	933.0
cSt at 100°C	6.3	7.9	10.9	13.9	18.3	25.9	38.6	44.9	62.8	79.5
Viscosity Index	159	133	147	148	144	152	169	159	165	164
Copper Corrosion 24 Hrs at 121°C	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B
Rust Protection, Distilled and Synthetic Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
FZG Scuffing, Fail Stage,	10	11	11	13	13	13+	13+	13+	13+	13+
Colour, Max	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
TOST Life, Hrs	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+

Precautions

The Mobil SHC 600 Series oils are manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to our Imperial Oil Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

Due to continual product research and development, the information contained herein is subject to changes without notification.

Additional important health and safety information on this product can be found in the Material Safety Data Sheet, which is available online at www.imperialoil.ca/mobil or by contacting Lubricants and Petroleum Specialities, Technical Services, Technical Help Desk: 1-800-268-3183 © 2001 Imperial Oil

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