Mobil SHC<sup>™</sup> Gear OH Series Page 1 of 3



#### Mobil SHC™ Gear OH Series

Mobil Industrial, United States

Exceptional Performance Gear Oils for Off-Highway Equipment

### **Product Description**

The Mobil SHC™ Gear OH Series lubricants are exceptional performance heavy-duty gear oils primarily designed to lubricate enclosed gearing as well as plain and element bearings in off-highway equipment subject to shock and heavy loading. They are designed to provide outstanding service in terms of equipment protect life, and problem-free operation helping to enable increased customer productivity. These scientifically engineered synthetic lubricants are formulated from syntheti fluids that have exceptional oxidation and thermal properties and excellent low temperature fluidity. The combination of a naturally high viscosity index and a cadditive system helps enable these products to provide outstanding performance under severe high and low temperature operating conditions. The nature synthetic base fluids also contributes to the products' excellent low temperature performance. They deliver outstanding gear scuffing protection in heavily I gearboxes. The synthetic base stocks have inherently low traction properties that result in low fluid friction in the load zone of non-conforming surfaces such as gear rolling element bearings. Reduced fluid friction produces lower operating temperatures and improved gear efficiency. The Mobil SHC Gear OH Series is available viscosity range from ISO VG 320 to 680, and are the products of choice for key OEMs and customers for demanding off-highway applications.

#### Features and Benefits

The Mobil SHC Gear OH Series of lubricants is a member of the Mobil SHC brand of products. These scientifically engineered synthetic lubricants symboli continuing commitment to using advanced technology to provide outstanding lubricant products. The Mobil SHC Gear OH Series of lubricants provide benef possible with mineral stocks, particularly under extreme high and low temperature operating conditions.

Our formulation scientists have used a proprietary additive combination that fortifies the base fluids to provide excellent EP and anti-wear performance that prequipment, even under heavy load situations. Specific features and potential benefits for the Mobil SHC Gear OH Series of lubricants include:

| Features   | Advantages and Potential Benefits  |
|--|--|
| Outstanding load-carrying and antiwear properties              | Helps extend gear life and reduce maintenance costs  |
| High viscosity index   | Trouble-free operation over a wide temperature range particularly at extremely low temperature |
| Low traction properties  | Helps improve gear efficiency and lower operating temperatures lead to lower operating costs   |
| Outstanding thermal/oxidation resistance and long product life | Helps reduce lubricant consumption, which can reduce product and change-out costs              |
| Light color  | Helps minimize the need for gear cleaning prior to inspections, which can reduce maintenance c |

# **Applications**

Application Considerations: While the Mobil SHC Gear OH Series are compatible with mineral oil based products, admixture may detract from their performance consequently it is recommended that before changing a system to one of the Mobil SHC Gear OH Series, it should be thoroughly cleaned out and flushed to achie maximum performance benefits.

Mobil SHC Gear OH Series oils are recommended for many types of enclosed steel-on-steel gear drives. They are suitable for both circulation and splash lubr systems. Mobil SHC Gear OH Series is available in viscosities from ISO 320 to ISO 680, providing the right lubrication option for low temperature applications where points as low as -45°C (-49°F) are required to high temperature applications where operating temperatures of 121°C (250°F) are encountered. They are parti recommended for lubricating gear sets in off-highway applications such as those found in mining, where heavy or shock loads and boundary lubrication condition prevail.

### Specifications and Approvals

| This product has the following approvals: | 680 |
|---|-----|
| GE OHV D50E35A/B/C/D/E                    | X   |

Mobil SHC™ Gear OH Series Page 2 of 3

## Properties and Specifications

| Property  | 320     | 460     | 680     |
|---|---------|---------|---------|
| Grade   | ISO 320 | ISO 460 | ISO 680 |
| ASTM Color, ASTM D1500  | L0.5    | L0.5    | L0.5    |
| Brookfield Viscosity @ -28.9 C, mPa.s, ASTM D2983                 | 60000   | 110000  | 170000  |
| Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130             | 1B      | 1B      | 1B      |
| Density @ 15.6 C, kg/l, ASTM D4052                                | 0.86    | 0.86    | 0.86    |
| FZG Scuffing, Fail Load Stage, A/8.3/90, ISO 14635-1(mod)         | >13     | >13     | >13     |
| Flash Point, Cleveland Open Cup, °C, ASTM D92                     | 233     | 233     | 233     |
| Foam, Sequence I, Stability, ml, ASTM D892                        | 0       | 0       | 0       |
| Foam, Sequence I, Tendency, ml, ASTM D892                         | 0       | 0       | 0       |
| Foam, Sequence II, Stability, ml, ASTM D892                       | 0       | 0       | 0       |
| Foam, Sequence II, Tendency, ml, ASTM D892                        | 0       | 0       | 0       |
| Foam, Sequence III, Stability, ml, ASTM D892                      | 0       | 0       | 0       |
| Foam, Sequence III, Tendency, ml, ASTM D892                       | 0       | 0       | 0       |
| Four-Ball Extreme Pressure Test, Load Wear Index, kgf, ASTM D2783 | 62      | 62      | 62      |
| Four-Ball Extreme Pressure Test, Weld Load, kgf, ASTM D2783       | 250     | 250     | 250     |
| Kinematic Viscosity @ 100 C, mm2/s, ASTM D445                     | 40.1    | 54.9    | 76.1    |
| Kinematic Viscosity @ 40 C, mm2/s, ASTM D445                      | 320     | 460     | 680     |
| Pour Point, °C, ASTM D5950  | -45     | -42     | -39     |
| Rust Characteristics, Procedure B, ASTM D665                      | PASS    | PASS    | PASS    |
| Total Acid Number, mgKOH/g, ASTM D664                             | 0.6     | 0.6     | 0.6     |
| Viscosity Index, ASTM D2270                                       | 178     | 186     | 193     |

### Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.as

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

12-2021

### Exxon Mobil Corporation

22777 Springwoods Village Parkway Spring TX 77389

1-800-ASK MOBIL (275-6624)

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance and do not constitute a specification.

Mobil SHC™ Gear OH Series Page 3 of 3

are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All proc may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

