

# MOBIL SHC™ GEAR 22M, 46M SERIES

Mobil Industrial, Japan

Gear Oils

## **Product Description**

Mobil SHC Gear 22M and 46M are supreme performance ultra high viscosity synthetic lubricants designed specifically for use in heavily loaded, low speed open where boundary lubrication conditions often prevail. They are formulated from synthetic base stocks, which have remarkable low-temperature fluidity, even at suc viscosity grades. These ultra high viscosity products can be pumped over relatively long distances and use standard spray application equipment. The combination naturally high viscosity index and a unique additive system gives the products exceptional thermal/oxidative properties and provides outstanding performance severe high and low temperature operating conditions even with very slow moving gears. The additive formulation also provides excellent gear scuffing protanti-wear performance and rust and corrosion inhibition.

Mobil SHC Gear 22M and 46M exceed Falk Corporation's minimum viscosity requirements for intermittent lubrication of gears - winter and summer grades, respectives grades also meet the viscosity requirements for AGMA lubricant numbers 14R and 15R, respectively, although they are not residual lubricants, but are leading synthetic products. Mobil SHC Gear 22M and 46M do not contain any solvent or any asphaltic-type base oil.

#### Features and Benefits

Mobil SHC Gear 22M and 46M lubricants are leading members of the Mobil SHC brand of products that are world-renowned for their innovation and performance from these scientifically engineered synthetic lubricants symbolize the continuing commitment to using advanced technology to provide outstanding lubricant products. SHC Gear 22M and 46M provide benefits not possible with mineral stocks, particularly under extreme high and low temperature operating conditions, and performance features and customer benefits.

Our formulation scientists have used innovative combinations of base oils plus a proprietary additive combination that fortifies the base oils to provide exceller scuffing protection and anti-wear performance, even in shock load situations. The resulting finished products have shown exceptional performance in OEM evalu customer field tests and commercial use. These ultra high viscosity products are particularly effective in low-speed, high load, high temperature situations and pexcellent gear and bearing protection, longer oil life and excellent all-round service compared with conventional products.

Specific features and potential benefits for the Mobil SHC Gear 22M and 46M lubricants include:

Features	Advantages and Potential Benefits	
Thick EHL fluid film formation and selected additives provide outstanding load-carrying, antiwear and tackiness properties	Helps extend gear life, less downtime and reduce maintenance replacement cost	
	Avoids potential for solvent retention and reduced viscosity solvent-type products	
	Provides much thicker EHL film compared with semi-fluid grease pro	
Excellent pumpability at ambient temperatures	Helps reduce in pump replacement costs	
Uses existing lubricant spray equipment	Low-cost conversion from asphaltic of semi-fluid grease products	
Lower application rates than greases, less waste compared with asphalt/solvent products	Helps reduce lubricant consumption and disposal costs	
Does not contain solids or asphaltic resins	Absence of hard-packed gear root deposits results in reduction downtime and maintenance costs	
Light colored product	Helps avoid need for costly gear cleaning prior to inspection	
Solvent-free	Helps avoid potential safety issues related to volatile, low flash solven	

Application Considerations: Normally, conversion to Mobil SHC Gear 22M or 46M from asphaltic or grease products will be a simple process with no change in lul spray equipment. It is recommended that the gears be thoroughly cleaned to take advantage of the light color of these synthetic products. Consult your representative for further details on lubricant conversion.

Mobil SHC Gear 22M and 46M are designed specifically for use in heavily loaded, low speed open gearing which drive stationary rotating machinery. Product is ty applied by intermittent by spray nozzle systems. Specific applications include:

- Kilns and mills in metal mining, cement and limestone production and in sugar plants
- Slow speed, heavily loaded plain and rolling contact bearings

## **Properties and Specifications**

Property	22M	46M
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1B	1B
Density @ 15.6 C, kg/l, ASTM D4052	0.890	0.924
Flash Point, Cleveland Open Cup, °C, ASTM D92	240	240
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	700	1375
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	22000	46000
Pour Point, °C, ASTM D97	6	15
Viscosity Index, ASTM D2270	180	180

# 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.

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