

Product Data Sheet

Mobil Glygoyle Series High Performance Lubricants

Product Description

Mobil Glygoyle Series oils are polyalkyleneglycol-based (PAG) high performance lubricants that provide outstanding lubrication in extreme-temperature gear, bearing and circulation system applications in conditions well beyond the capabilities of mineral oils. They are shear-stable and have outstanding resistance to thermal degradation, oxidation and the formation of sludge and deposits. They incorporate a proprietary additive package designed to enhance EP/anti-wear protection, corrosion and rust protection and foam resistance without detracting from the intrinsic attributes of the PAG base oils.

Mobil Glygoyle Series have very high viscosity indices and, being wax-free, they have extremely low pour points. Their coefficients of friction and traction (for example, in non-conforming gear or bearing contacts) are lower than for mineral oils. These superior lubricity characteristics help deliver lower operating temperatures in many applications.

Mobil Glygoyle Series products have provided outstanding performance in the most severe industrial applications for more than 25 years. They are recommended for use by major plastic calendar, paper machine bearing, compressor and gear manufacturers, and are the products of choice for many severe service applications.

Features & Benefits

The Mobil Glygoyle brand of lubricants is recognised and appreciated around the world for its innovation and outstanding performance. These molecular designed polyalkyleneglycol synthetic products have been specially chosen for use in the Mobil Glygoyle Series and demonstrate the continuing commitment to using advanced technology to provide outstanding product performance. A key factor in the development of Mobil Glygoyle Series were the close contacts between our scientists and application specialists with key OEMs to ensure that our product offerings will provide exceptional performance in the continually evolving industrial equipment designs.

Mobil Glygoyle products were primarily designed to meet the critical high temperature needs of a variety of industrial equipment where mineral-based and other synthetic products were not able to perform satisfactorily. Additional features such as low friction and traction, gas absorption properties resulted in even broader industrial application opportunities. Mobil Glygoyle Series lubricants offer the following features and potential benefits:

Features	Advantages and Potential Benefits
Superb thermal and oxidative stability, and resistance to sludge and deposit formation	Extended lubricant life, increased production, less scheduled and unscheduled downtime.
	Lower maintenance costs and replacement expenditures
Low coefficients of traction and friction	Reduced operating temperatures, greater equipment efficiency, and potential for reduced power consumption and longer seal life.
	Minimises effects of micro slip in rolling contact bearings for longer element life potential
Very high thermal conductivity	Contributes to lower operating temperatures, longer charge life.
Excellent low-temperature fluidity	Lower power consumption and smoother running due to quicker warm-up at low ambient temperature
Reduced gear tooth wear at high temperatures for both steel-on-steel and steel-on-bronze metallurgies	Reduced operating costs due to less wear, reduced operating temperature and smoother running
Reduced absorption and viscosity reduction with pressurised hydrocarbon gases	Improved film protection and longer life for natural gas compressors
Multipurpose industrial equipment capability	Potential to use fewer products with reduced inventory costs and less chance for mis-lubrication

Applications

As with other polyglycol-based lubricants, Mobil Glygoyle products are not miscible with mineral oils and must not be used as make-up for systems filled with conventional mineral oils, nor must mineral oils be used as make-up for systems filled with Mobil Glygoyle products. Mobil Glygoyle Series are hygroscopic and do not separate from water. Due to their inherent high specific gravity, water does not drop to the bottom of reservoirs. The Mobil Glygoyle Series oils are compatible with many seal materials; however, there is the potential for substantial variations in the elastomers being used today. For best results, consult your equipment supplier, seal manufacturer, or your local Mobil representative to verify compatibility.

Mobil Glygoyle lubricants are recommended for the most severe conditions in all types of plain and anti-friction bearings and industrial enclosed gears up to a bulk oil temperature of 200°C. Specific applications include:

- Severe plastic calendar operations
- High temperature paper machine bearings
- Industrial enclosed gears – spur, bevel and worm gearing
- Reciprocating and rotary air compressors
- Mobil Glygoyle Series 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
- Glygoyle 11 is particularly suitable for paint oven chains as it is not formulated with silicone additives

Typical Properties

Mobil Glygoyle		11	22	30
	Test Method			
ISO Viscosity Grade		-	150	220
Viscosity,	ASTM D 445			
cSt at 40°C		85.1	161	181
cSt at 100°C		12.1	22.4	30.9
Pour Point, °C	ASTM D 97	-36	-41	-41
Flash Point, °C	ASTM D 92	210	229	221
Specific Gravity at 20°C	ASTM D 1298	1.009	1.007	1.006
Copper Strip Corrosion, 24 hr at 100°C	ASTM D 130	1B	1B	1B
Rust Protection, Distilled Water	ASTM D 665	Pass	Pass	Pass
Foam Test, Sequence I, Tendency/stability, ml/ml	ASTM D 892	5/0	5/0	5/0
4-Ball Wear, Scar, mm	ASTM D 4172	0.4	0.4	0.4
FZG Gear Test, Failure Stage	DIN 51534 (Mod)	12+	12+	12+

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Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly. All products may not be available locally.

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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 Esso Petroleum Company, Ltd., by telephoning 01372 222000. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

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