Mobil

Mobil Glygoyle™ 11, 22, and 30

Mobil Industrial , Lithuania

High Performance Lubricants

Product Description

Mobil Glygoyle™ 11, 22, and 30 oils are Polyalkylene Glycol-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 11,22, 30 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 exceptional lubricity characteristics help deliver lower operating temperatures in many applications.

Mobil Glygoyle 11 ,22, and 30 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 and Benefits

The Mobil Glygoyle brand of lubricants is recognised and appreciated around the world for its innovation and outstanding performance. The molecular designed Polyalkylene Glycol synthetic products have been specially chosen for use in Mobil Glygoyle 11, 22, and 30 and demonstrate the continuing commitment to using advanced technology to provide outstanding product performance. A key factor in the development of Mobil Glygoyle 11, 22, and 30 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 11, 22, and 30 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 long seal life. Minimizes effects of micro slip in rolling contact bearings for longer element life potential
Very high thermal conductivity	Helps to lower operating temperature, increasing charge life.
Excellent low-temperature fluidity	Enables quicker warm-up at low ambient temperature resulting in reduced power consumption and smoother running.
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

Features	Advantages and Potential Benefits
Reduced absorption and viscosity reduction with pressurised hydrocarbon gases	Improved film protection and long 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

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, natural gas, CO2 and other process gasses

Application notes

Polyalkylene Glycol-based (PAG) lubricants have some inherent excellent lubrication properties imparted by the PAG base oil. However, PAG based lubricants do have limitations with respect to compatibility with seal and coating materials, some varieties of light metal alloys and other lubricants. Before applying any PAG lubricant, contact the original equipment manufacturer for specific advice on the application.

Compatibility with other lubricants

Mobil Glygoyle 11, 22, and 30 are not compatible with mineral oils and most other synthetic lubricants. Additionally, depending on the specific type of PAG base fluid, they may not be compatible with other PAG type lubricants. (e. g. Mobil Glygoyle 11, 22, 30 and Mobil Glygoyle ISO VG Series are not miscible)Mobil Glygoyle 11, 22, and 30 are not generally recommended for use in systems previously filled with mineral oils or PAO based synthetic lubricants. It is further recommended to check compatibility when topping up or replacing existing PAG fillings with Mobil Glygoyle products, generally the preference is to avoid mixtures by draining, flushing and refilling. When changing from mineral oil or other synthetic products to Mobil Glygoyle products, it is critical to clean the system thoroughly and flush with suitable fluids prior to conversion. For further details please contact your ExxonMobil representative.

Water

Mobil Glygoyle 11, 22, and 30, along with all PAG based lubricants, are hygroscopic and absorb more water than mineral oils or synthetic hydrocarbons before. Therefore extra care should be taken not to expose PAG oils to excessive moisture. Due to their inherent high specific gravity, water does not drop to the bottom of reservoirs, but stays on top of the lubricant.

Seal compatibility

PAG based lubricants are not compatible with most standard seal materials used for mineral oils or synthetic hydrocarbons. Incompatible materials are likely to shrink or swell, thus causing severe leakage or seizure of the seal. When converting from mineral oil or synthetic hydrocarbons to Mobil Glygoyle 11, 22, or 30, seal compatibility must be considered.. FKM and VMQ are normally suitable for use with PAG. NBR materials may be used but have restricted temperature range. In all cases, operating conditions and the variability of elastomer properties from different manufactures should be considered. For best results, consult the equipment supplier or seal manufacturer for specific recommendations.

Light Metal Alloys

Mobil Glygoyle 11, 22, and 30 and PAG lubricants are well suited for gear applications with ferrous and most non ferrous materials. However, Mobil Glygoyle products and PAG lubricants are not recommended for use with light metal alloys containing Aluminum or Magnesium. PAG lubricants can lead to increased wear when used with light metal alloys of this nature. Please consult the original equipment manufacturer for additional information.

Other Materials

Paints, coatings, and some plastics are not suitable for use with PAG lubricants. In general two component paints (reactive paints, epoxy resins) are suitable

for use for interior coatings in contact with the lubricant. Otherwise, interiors in contact with the lubricant should be left uncoated. Materials used for oil level gages, inspection doors etc., should preferably be made of natural glass or polyamide materials. Other transparent plastics, e.g. Plexiglas, may deteriorate and crack under stress.

Properties and Specifications

Property	MOBIL GLYGOYLE 11	MOBIL GLYGOYLE 22	MOBIL GLYGOYLE 30
Grade	N/A	N/A	N/A
Copper Strip Corrosion, 24 h, 100 C, Rating, ASTM D130	1B	1B	1B
FZG Scuffing, Fail Load Stage, A/8.3/90, ISO 14635-1	12+	12+	12+
Flash Point, Cleveland Open Cup, °C, ASTM D92	226	229	221
Foam, Sequence I, Stability, ml, ASTM D892	0	0	0
Foam, Sequence I, Tendency, ml, ASTM D892	5	5	5
Four-Ball Wear Test, Scar Diameter, mm, ASTM D4172	0.4	0.4	0.4
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	11.5	25.1	30.9
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	85	177	224
Pour Point, °C, ASTM D97	-45	-41	-41
Rust Characteristics, Procedure A, ASTM D665	PASS	PASS	PASS
Specific Gravity, 20 C/20 C, ASTM D1298	1.009	1.007	1.006

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.aspx

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit www.exxonmobil.com

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