

Product Description

Mobil EAL Syndraulic 46 is one of Mobil's Environmental Awareness Lubricants (EAL). It is a fully synthetic lubricant developed to satisfy customer needs for a very high performance hydraulic and circulation oil which is readily biodegradable and virtually non-toxic. Mobil EAL Syndraulic 46 provides the outstanding anti-wear and film-strength characteristics necessary for critical hydraulic systems operating under moderate to severe conditions.

Mobil EAL Syndraulic 46 is formulated from high Viscosity Index synthetic ester basestocks and an advanced additive package. Compared with the best vegetable oil-based hydraulic oils, this product provides improved oxidation stability, together with substantially better low temperature performance.

Mobil EAL Syndraulic 46 meets or surpasses the following builder test requirements:

- Mannesmann Rexroth sheet RD 902221/03.94
- Denison HF-0 and TP 30283A Pump Tests
- Vickers 35VQ25

The 12-stage rating in the FZG Gear Test demonstrates a high level of protection against wear and scuffing.

Benefits

Mobil EAL Syndraulic 46 offers the following benefits:

- Readily biodegradable and virtually non-toxic for environmental protection
- Outstanding load-carrying and anti-wear properties for superior protection against wear
- Superior oxidation and thermal stability compared with the best vegetable oil based products leading to extended service life
- Good low temperature flow properties
- Multi-metal compatibility to protect pumps using copper alloys
- Excellent protection against rust including surfaces only intermittently wetted by oil

Applications

Mobil EAL Syndraulic 46 is Mobil's primary recommendation for most hydraulic or circulation systems where a readily biodegradable and virtually non-toxic fluid is required. It can be used in industrial, marine, and mobile equipment, including high pressure systems, systems with servo valves, and all robotics.

Compatibility with Elastomers and Other Oils

Mobil EAL Syndraulic 46 can be used with all elastomers which are compatible with conventional mineral oils. For best overall results use either Viton or Buna N (low to medium nitrile levels).

Mobil EAL Syndraulic 46 is compatible with most other industrial and circulation oils. While mixing would not result in equipment performance problems, it would detract from the biodegradability of Mobil EAL Syndraulic 46.

Mixing with high detergent/high dispersant oils such as diesel engine oil could reduce performance levels and will change the biodegradability and toxicity of the Mobil product. This is particularly true where moisture is present.

To achieve the best overall performance, Mobil EAL Syndraulic 46 should not be contaminated with other oils or water. Mobil will be pleased to advise on flushing procedures.

Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly.

Details on handling, as well as health and safety information, can be found in the Material Safety Data Bulletin which can be obtained through Mobil Oil Company Ltd., by telephoning 01372 22 2000.

Typical physical characteristics are given in the table. These are intended as a guide to industry and are not necessarily manufacturing or marketing specifications.

Product Characteristics

	Test Method	Mobil EAL Syndraulic 46
ISO VG		46
Viscosity, cSt at 40°C	ASTM D445	45
Viscosity, cSt at 100°C	ASTM D445	8.0
Viscosity Index	ASTM D2270	153
Specific Gravity	ASTM D1298	0.910
Flash Point, °C	ASTM D92	234
Pour Point, °C	ASTM D97	-42
FZG Gear Test Failure Stages	DIN 51534	12
Vickers V-104C Pump Wear, mg	ASTM D2882	1
Biodegradability, CO ₂ conversion %	EPA 5606-82-002	60 minimum
Aquatic Toxicity, LC50, Trout, ppm	Modified OECD 203 1-12	1000 minimum

Due to continual product research and development, the information contained herein is subject to change without notice

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