



9032-9150 MONOLEC®

Synthetic Industrial Oils

Extends oil drain intervals, reduces wear and oil consumption, and practically eliminates deposits and sludge formation – designed for equipment operating at extreme temperatures.

LE's MONOLEC Synthetic Industrial Oils are completely 100% synthetic oils and have been carefully formulated to exceed all requirements for air compressors, vacuum pumps and hydraulic systems operating at above and below normal temperatures.

Their sophisticated formulas contain a blend of very high VI synthetic base oils, in addition to MONOLEC, LE's exclusive wear-reducing additive. Their specially developed additive package, designed solely for synthetic oils, contains an anti-wear compound which acts synergistically with MONOLEC to control wear as pressures and temperatures rise. In addition rust and oxidation inhibitors and a foam suppressant have been added to complete the package.

USER BENEFITS:

Far Less Oil Used

- **Greatly Extended Drain Intervals** – Completely synthetic formulations deliver longer effective oil life versus competitive oils as a result of the oxidation resistance.
- **Less Make-Up Oil Required** – The completely synthetic formulations have low volatility to reduce oil consumption and carry-over into the air system.

Longer Equipment Life and Greater Equipment Reliability – Will reduce capital expenditures and operating budgets in many areas.

- **Reduced Wear** – With the triple protection of the oil's tough film strength, MONOLEC, LE's exclusive wear-reducing additive and special anti-wear additives. This reduced wear occurs even when compared with other synthetic and petroleum oils.
- **Eliminates Carbon Deposits** – Because they are synthetic oils which will not oxidize like petroleum oils, these oils contain no petroleum to form hard carbon deposits which can impede heat transfer and possibly cause compressor receiver explosions. In fact, the potential for fires and explosions is significantly less than with petroleum oils.

- **Cooler, Cleaner Operation** – With far less carbon deposits, sludge and almost no varnish formation the entire system stays clean, runs cooler and the oil and filter life are greatly extended. A foam inhibitor helps lower operating temperatures and insures positive, uniform power flow in hydraulic systems. Excellent rust protection is due to the special rust inhibitors which are incorporated in these MONOLEC oils.

Lower Maintenance Costs and Reduced Downtime – This is achieved with far less oil used, less deposits to clean out, and fewer repairs or replacement parts and labor.

Improved Equipment Efficiency – Equipment which operates cooler and cleaner. Easy cold weather starts (-38°F to -65°F pour points) and high temperature limits which are fully 100°F above petroleum oils.

Excellent Compatibility – With seals, plastics and other lubricants to make conversion to LE's MONOLEC Synthetic Industrial Oils easy.

9032 – ISO 32

9046 – ISO 46

9068 – ISO 68

9100 – ISO 100

9150 – ISO 150

TYPICAL APPLICATIONS:

- Reciprocating Air Compressors
- Rotary Air Compressors
- Vacuum Pumps
- Hydraulic Systems
- Low/High Temperature Gear Applications (not EP)
- Low/High Temperature Fluid Power Drives
- Low/High Temperature Oil Lubricated Bearing Applications

WHAT IS MONOLEC®?

MONOLEC® is LE's exclusive wear-reducing additive which has proven its extraordinary performance in thousands of applications. It is an invaluable component in LE's engine oils, industrial oils and other lubricants bearing the MONOLEC® trademark.

MONOLEC® creates a singular molecule lubricating film on the metal surface, vastly increasing film strength without affecting tolerances. MONOLEC® allows opposing surfaces to slide by one another, greatly reducing friction, heat and wear.



LUBRICATION ENGINEERS, Inc.
LEADERS IN LUBRICANTS

LE Products manufactured under an
ISO 9001:2000 Certified Quality System

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MONOLEC SYNTHETIC INDUSTRIAL OILS
 have all the advantages and none of the disadvantages
 of commonly used synthetic oils

| CHARACTERISTIC | MONOLEC | PAO | ESTER |
|---|----------------|------------|--------------|
| Lubricity/Low Wear | Excellent | Good | Fair |
| Carbon Deposit Tendency | Low | Moderate | Very Low |
| Water Resistance | Excellent | Excellent | Poor |
| Thermal & Oxidation Stability | Excellent | Very Good | Excellent |
| Seal & Other Lubricant Compatibility | Very Good | Good | Fair |

**OUTSTANDING WEAR REDUCTION DEMONSTRATED
 BY SEVERE FOUR-BALL WEAR TESTS**

| PRODUCT | AVERAGE WEAR SCAR DIAMETER, MM |
|------------------|---|
| BRAND A | 0.70 |
| BRAND B | 1.60 |
| BRAND C | 0.95 |
| BRAND D | 0.65 |
| BRAND E | 1.80 |
| MONOLEC | 0.40 |
| Test Conditions: | ASTM D-4172 |
| Speed: | 1800 rpm |
| Load: | 40 Kg. |
| Temperature | 130°F |
| Duration: | 60 Minutes |



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