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# SYNTHETIC PAO R&O

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## SYNTHETIC COMPRESSOR OIL

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**Synthetic Compressor Oils** are fully formulated, high quality, synthetic, rotary screw, air compressor lubricants based on polyalphaolefin technology.

In service **Synthetic Compressor Oils** offer the following benefits:

- ◆ Superior oxidation and thermal stability for extended drain intervals of up to 5 times over conventional petroleum based lubricants
- ◆ Excellent solvency translates into 5-10% energy savings
- ◆ Excellent anti-wear performance and mild EP characteristics
- ◆ Resistance to system deposits
- ◆ Low carbon-forming tendency for cleaner gear and bearing components
- ◆ High flash points
- ◆ Excellent demulsibility
- ◆ Increased energy efficiency through better lubricity inherent in PAO fluids

### **Product Applications**

**Synthetic Compressor Oils** are synthetic-base, ashless, anti-wear circulating oil incorporating polyalphaolefin (PAO) basestocks and carefully selected additives. **Synthetic Compressor Oils** give outstanding performance in a wide range of gear, compressor and hydraulic applications in industrial service, such as paper mill drying sections, gear reducers, pumps, marine centrifuge gearboxes, and worm gears containing copper alloys where mild EP performance is required.

**ISO 46** and **ISO 68** grades are typically formulated for use in Rotary-Screw or Rotary-Vane type compressor applications, as well as vacuum pumps.

**ISO 100** grades are formulated for use in Reciprocating or Piston type applications.

**Always refer to owners' manual for proper Viscosity recommendations.**

**Synthetic Oil** is specifically formulated to provide excellent oxidation resistance at the high temperatures encountered in rotary air compressors, while the carefully balanced additive package provides protection to bearings and gears.

**Synthetic Oil** is also suitable for many gear oil applications, however, it is not an AGMA EP-type lubricant and is not recommended for heavily loaded machinery or where shock loading is likely to occur. **Ingear EP** gear oil is recommended for such applications.

### **Designed for today's severe operating demands**

Industrial equipment is increasingly required to operate under ever more demanding conditions. Newer machines have smaller lubricant reservoirs and are designed for faster speeds and higher unit loads, leading to higher operating temperatures. And older equipment is being run harder to maximize output. At the same time, the need to reduce operating costs has placed a premium on machine reliability and efficiency in order to maintain production rates and reduce costly unscheduled downtime. These circumstances have created a growing need for synthetic-base lubricants that can provide long-term, reliable service in severe, high-temperature, medium load conditions. Our **Synthetic Compressor Oils** line of synthetic-based lubricants are able to meet this need. **Synthetic Compressor Oils** can be used in systems operating at temperatures up to 135°C (275°F), which allows such systems to be run at optimal speeds, permitting higher production rates.

## Product Maintenance and Handling

**Synthetic Oil** is manufactured from high quality, synthetic base stocks carefully blended with selected additives. As with all of our products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. When no longer suitable for service, **Synthetic Oil** should not be mixed with used petroleum base oils which are intended to be collected and recycled by a re-refiner. Please refer to the Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation

## Typical Properties

Synthetic Oil Grade	3046	3068	3100
ISO Viscosity Grade	46	68	100
AGMA Number	0S	1S	3S
Density @ 15 °C, kg/m <sup>3</sup>	845	860	863
Colour, ASTM	<1	<1	<1
Pour Point, °C	<-57	<-48	<-43
Flash Point, °C - min	277	260	260
Viscosity Index	136	180	189
Kinematic Viscosity, cSt			
@ 40°C	46.0	68.0	100.0
@ 100°C	7.3	12.4	18.0
FZG gear test, minimum stages passed	12	12	12
Foam Test, ml			
Sequence 1	Nil/0	Nil/0	Nil/0
Sequence 2	Nil/0	Nil/0	Nil/0
Sequence 3	Nil/0	Nil/0	Nil/0
RBOT, oxidation life, minutes	1100	1100	1100

The typical properties shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.