Mobil Rarus™ 400 Series

Mobil Industrial , United States

Air Compressor Lubricants

Product Description

The Mobil Rarus™ 400 Series is a line of premium performance ashless air compressor lubricants designed to meet the stringent requirements of the major compressor manufacturers. They are formulated with high quality mineral base-oils and a high performance additive system designed to provide exceptional equipment protection and reliability for compressors operating under mild to severe conditions. They provide excellent wear protection and the ability to reduce maintenance costs through minimising equipment problems and downstream deposits and carryover. Because of their high FZG Ratings, the Mobil Rarus 400 Series make outstanding lubricants for compressor systems employing gears and bearings making them an excellent selection for crankcases as well as cylinder lubricants.

Features and Benefits

The use of the Mobil Rarus 400 Series oils can result in cleaner compressors and lower deposits compared to conventional mineral oils, resulting in longer running periods between maintenance intervals. Their excellent oxidation and thermal stability safely allow extended life capability while controlling sludge and deposit formation. They possess outstanding anti-wear and corrosion protection, which enhances equipment life and performance.

Features	Advantages and Potential Benefits
Low Ash and Carbon Formation	Improved valve performance Reduced deposits in discharge lines Reduced potential for fires and explosions in discharge systems Improved compressor performance
Outstanding Oxidation and Thermal Stability	Longer oil life Improved filter life Lower maintenance costs
High Load-carrying ability	Reduced wear of rings, cylinders, bearings and gears
Excellent Water Separability	Less carryover to downstream equipment Reduced sludge formation in crankcases and discharge lines Reduced blockage of coalescers Less potential for emulsion formation
Effective Rust and Corrosion Protection	Improved protection of valves and reduced wear of rings and cylinders

Applications

The Mobil Rarus 400 Series oils are recommended for single and multistage air compressors. They are particularly effective for continuous high temperature operation. The maximum compressed air temperature, according to DIN 51506, is 220 °C. They are suitable for reciprocating and rotary type machines with the lower viscosity grades mainly used in rotary compressors. Rarus 400 Series oils are recommended for units with a history of excess oil degradation, poor valve performance or deposit formation. They are compatible with all metals used in compressor construction and with mineral-oil compatible elastomers used in seals, O-rings and gaskets.

Mobil Rarus 400 Series oils are not intended or recommended for use in air compressors for breathing applications.

The following types of compressors have shown excellent performance with the Mobil Rarus 400 Series oils:

- Reciprocating air compressor crankcases and cylinders
- Rotary screw compressors
- Rotary vane compressors
- Axial and centrifugal compressors
- Compressor systems with critical gears and bearings
- Compressors used in stationary and mobile applications

Specifications and Approvals

This product meets or exceeds the requirements of:	424	425	426	427	429
China GB/T 12691-2021, L-DAB	X	X	X	X	X
China GB/T 12691-2021, L-DAH		X	X		
DIN 51506:1985-09 VDL	X	X	X	X	X

Properties and Specifications

Property	424	425	426	427	429
Grade	ISO VG 32	ISO VG 46	ISO VG 68	ISO VG 100	ISO VG 150
Ash, Sulfated, mass%, ASTM D874	‹0.01	<0.01	<0.01	<0.01	<0.01
Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130	1B	1B	1A	1B	1A
Density @ 15 C, kg/l, ASTM D1298	0.866	0.873	0.877	0.879	0.866
FZG Scuffing, Fail Load Stage, A/8.3/90, ISO 14635-1	12	11	12	11	11
Flash Point, Cleveland Open Cup, °C, ASTM D92	236	238	251	264	269
Foam, Sequence I, Stability, ml, ASTM D892	0	0	0	0	20
Foam, Sequence I, Tendency, ml, ASTM D892	10	20	0	30	430
Kinematic Viscosity @ 100 C, mm2/s, ASTM D445	5.4	6.9	8.9	11.6	14.7
Kinematic Viscosity @ 40 C, mm2/s, ASTM D445	32	46	68	104.6	147.3
Rust Characteristics, Procedure A, ASTM D665			PASS	PASS	PASS
Rust Characteristics, Procedure B, Rating, ASTM D665	PASS	PASS	PASS		
Rust Prevention, Procedure B, Rating, ASTM D665				PASS	PASS
Viscosity Index, ASTM D2270	105	105	105	100	100

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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