

RENOLIN UNISYN OL

Synthetic EP air compressor oils based on PAO, for screw, vane and piston compressors. High-performance synthetic, PAO - based hydraulic fluids

Description

Compressed air has become a major form of energy and the reliable generation of compressed air is vital. Operators require compressors to function perfectly over and beyond entire service intervals. The RENOLIN UNISYN OL series was developed to meet the increased requirements of compressor manufacturers on the service life of compressor oils. Due to the function of compressors, intensive whirling of the cooling oil and air occurs. At high compression temperatures, the oils are subjected to a strong oxidative attack that accelerates ageing. The selection of special synthetic base oils and additive systems makes long, interruption-free operation possible. To ensure optimum performance of the oil separator, the air release properties and low foaming are characteristic for screw compressor oils. RENOLIN UNISYN OL 32, 46 and 68 offer long service life, and they fulfill the requirements

Application

RENOLIN UNISYN OL products are recommended for use in flooded or oil injection screw-type air compressors and turbo compressors (ISO VG 32, 46, 68) and for piston and rotary vane compressors (ISO VG 100, 150). RENOLIN UNISYN OL products should always be used if mineral oil-based products are found to display insufficient thermal stability (resistance to ageing) or poor viscosity-temperature behaviour. Compared to mineral oil-based oils, RENO-LIN UNISYN OL products foam less, offer better demulsification and have superior air release properties. The use of RENOLIN UNISYN OL products is especially recommended in unfavorable conditions and at high temperatures in which other oils fail because they allow coke to form, thus leading to unacceptably short oil life. These oils are also recommended for compressors which are subject to extreme loads.

mentioned above as well as the requirements according to DIN 51 506 VDL.

The most important functions of lubricating and cooling oils in screw compressors are:

- Cooling the compressed air
- Bearing lubrication
- Sealing the chambers
- Corrosion protection
- Preventing the formation of deposits.

RENOLIN UNISYN OL 32, 46 and 68 have been specially developed for use in oil injected screw compressors and in turbo compressors. RENOLIN UNISYN OL 100 and 150 are recommended in particular for long-term use in piston and rotary compressors that must meet the strict requirements for low residue formation according to DIN 51 506 VDL. RENOLIN UNISYN OL fluids can also be used as hydraulic fluids according to DIN 51 524.

Advantages/Benefits

- Excellent oxidative and thermal stability
- Good demul sifying properties.
- Low evaporation losses
- · Minimal cooking
- Low foaming tendency
- Good air release properties
- High corrosion protection
- Excellent EP/W ear protection
- Excellent ageing resistance
- Very good viscosity -temperature behaviour.
- Good low-temperature behaviour.
- Good compatibility with elastomers.



Specification

DIN 51 506 : VDL

ISO DP 6521 (draft): L -DAB, L-DAH / L-DAG

DIN 51 524: HLP, (HVLP)

Typical Characteristics

Properties	Unit			Value			Test Method
ISO Viscosity Grade		32	46	68	100	150	
Viscosity @ 40 °C	mm²/s	32	46.7	68.7	102	146	ASTM D-445
@ 100 °C	mm²/s	6.04	8.0	11.0	14.6	19.0	ASTM D-445
Viscosity Index		138	143	151	148	148	ASTM D-2270
Density @ 35 °C	kg/m ³	829	830	832	836	838	ASTM D-1298
Flash Point	°C	250	255	256	258	258	ASTM D-92
Pour Point	°C	- 40	- 40	- 36	-36	-36	ASTM D-97
Neutralization Number	mg KOH/g	0.2	0.2	0.2	0.2	0.2	ASTM D-974