Synthetic air compressor oil

Delta Lube 06

Advantages

- Low maintenance and operating costs due to long oil change intervals of up to 12,000 operating hours* in oil-injected screw compressors.
- Easy conversion from mineral oils due to the neutral sealing characteristics of the oils**.
- Minimal oil vaporisation due to high vaporisation stability and therefore clean (oil-free) compressed air and an oil-free compressed air network when compared to conventional mineral oils. Avoidance of unnecessary cleaning costs and unplanned pneumatic valve downtimes caused by resin saturation.
- Minimal formation of oxidation residue in the oil circuit, leading to low operating costs due to the long service life of the oil filter and separator.

Description

Delta Lube 06 is an oil for air compressors based on synthetic ester oil with special additives. This oil can be mixed with mineral oils and synthetic hydrocarbon oils. **Delta Lube 06** cannot be mixed with polyglycol-based oils. **Delta Lube 06** is particularly resistant to ageing and oxidation. It boasts an excellent viscosity temperature response.

Fields of application

Delta Lube 06 has been designed especially for the lubrication of screw compressors under high stress. The oil is designed to allow for oil change intervals of up to 12,000 operating hours* in oil-injected screw compressors.

Delta Lube 06 can also be used for the conversion of used compressors that previously ran on mineral oils. **Delta Lube 06** exhibits largely neutral behaviour compared to the typical elastomers** used in air compressors. There is little likelihood of leakages.

With its synthetic base oil, **Delta Lube 06** provides improved oxidation resistance when compared to conventional synthetic oils.

The development of oxidation residue in the compressor is thus reduced which, along with long oil change intervals, contributes to an extensive service life for the oil filter and separator. Special inhibitors in the oil keep the compressor clean from within, allowing for high levels of efficiency.

Thanks to the vaporisation-resistant base oil, the proportion of oil vapour in the compressed air can be reduced considerably compared to conventional mineral oils. This contributes to lower oil consumption and cleaner compressed air. In addition, the resin saturation typical of pneumatic valves can also be avoided within the compressed air network thanks to the low oil content of **Delta Lube 06**.

Application instructions

When selecting the oil viscosity for air compressors, observe the manufacturer's specifications.

For the conversion of a used compressor the current compressor oil should be removed at operating temperature from the overall oil circuit. It is advisable to completely renew the oil filter and oil separator during the oil conversion. **Delta Lube 06** can then filled as the operating oil.

If the conversion is from a mineral oil there may be some oxidation residue present in the compressor. This is noticeable from a black discoloration for example, or from the staining caused by the used oil. Since this residue can lead to a reduction in the service life of the newly filled **Delta Lube 06**, the compressor should be cleaned before conversion.

Further information is available from AERZEN. After the conversion to **Delta Lube 06** it is advisable to determine the oil change interval using an oil analysis.



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Safety data sheet

A current safety data sheet can be requested by e-mailing info@aerzener.com.

Technical data

Product data	Validation method	Unit	ISO
Colour:			blue, clear
Density at 20°C, approx.	DIN 51757	g/cm³	0.92
Kinematic viscosity, part 1, ASTMA D-445/ASTM -D7042	DIN 51562		
at 40°C, approx.		mm²/s	52
at 100 °C, approx.		mm²/s	7.5
Viscosity index	DIN ISO 2909		≥90
Corrosion on copper (3h at 100°C)	DIN EN ISO 2160	Degree of corrosion	1-100
Foaming test, ASTM D 892, sequence I/24°C	ISO 6247	ml	≤50/ 0
Foaming test, ASTM D 892, sequence II/93.5°C	ISO 6247	ml	≤50/ 0
Foaming test, ASTM D 892, sequence III/24°C	ISO 6247	ml	≤50/ 0
Pour point	DIN ISO 3016	°C	≤-39
Demulsifying ability, ASTM D 1401, at 54°C	DIN EN ISO 6614	ml	40 / 37 / 3
Flash point, Cleveland, open cup	DIN EN ISO 2592	°C	≥248
Minimum storage period after production - when stored in dry, frost-free areas and in packages with original seals: approx.			60 months

^{*}The information on oil change intervals constitutes guide values that are based on practical experience. It is dependent on the specified and intended purpose of use, the application technology and the technical condition of the compressor. Lubricants change state according to temperature, pressure and time scale, depending on the given type of mechanical-dynamic stress, the mixing of residual oils and the deposits left by the previous oil. These changes in product characteristics can have an influence on oil change intervals and the functioning of components.

^{**} This information represents up-to-date experiential data. As a result of the many different compositions within the elastomer families, we recommend that users inspect levels of compatibility and application-relevant influences once more themselves under real conditions.





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These product details are based on our general experience and knowledge at the time of printing and are intended to give the technically-experienced reader information for possible applications. However, this product information does not act as an assurance of the product's properties nor as a guarantee of the suitability of the product in individual cases. It does not absolve the user from carrying out a prior trial application of the selected product. We recommend an individual consultation and, upon request, we will gladly provide test samples where possible.

The data provided here are based on standardised testing methods under laboratory conditions - they serve as guide values and are subject to variations. The user should ensure that the most current version of this data sheet is being used. It is the responsibility of the user to evaluate and use these products with appropriate caution, to judge their suitability for the specific application and to observe all applicable laws and regulations. For information on relevant health, safety and environmental aspects a safety data sheet can be requested. It contains detailed information on storage, safe handling and disposal of products. AERZEN is not responsible for damage or injury relating to unforeseen use of the product, insufficient observance of recommendations or for hazards inherent in the nature of the product. Our General Delivery Terms apply to all deliveries, in particular the liability terms contained therein. Further product information can be requested from the AERZEN Applications Engineering Division. Aerzener Maschinenfabrik GmbH, Reherweg 28, 31855 Aerzen, Germany, Phone: +49 5154 / 810, E-mail: info@aerzener.com