

## Klüber Summit FG Elite 46

Fully synthetic compressor oil for the food-processing and pharmaceutical industries

#### Your benefits at a glance

- Klüber Summit FG Elite 46 is NSF H1 registered for use in the food-processing and pharmaceutical industries and complies with FDA 21 CFR Sec 178.3570
- ISO 21469 certified supports compliance with the hygienic requirements of your production. You will find further
  information on ISO Standard 21469 on our website www.klueber.com
- Low maintenance and operating costs due to extended oil change intervals up to 8,000 operating hours\* in oilinjected screw-type compressors
- Easy compressor conversion from mineral oils to the synthetic Klüber Summit FG Elite 46 due to miscibility and compatibility with common seal materials\*\*
- The special product formulation ensures cleanliness of the oil-carrying components, thus enabling efficient
  operation of compressed-air plants.
- Longer service life of oil filters, activated carbon filters and oil separators
- Very good water separation ability

#### Your requirements - our solution

Klüber Summit FG Elite 46 is a compressoir oil especially developed for the food-processing and pharmaceutical industries. It clearly outperforms conventional food-grade compressor oils. Its high-quality base oils and special additive package tuned to the requirements of air compressors offer excellent oxidation stability. Due to the innovative product concept, the formation of oil-related residues is reduced and and oxidative deposits or sludge build-up minimised. These benefits enable longer oil change intervals and service life of oil filters and separators.

The product is miscible with mineral oils and other synthetic hydrocarbon oils. It is registered as NSF H1 and therefore complies with FDA 21 CFR 178.3570. Klüber Summit FG Elite 46 was developed for incidental contact with products and packaging materials in the food-processing, cosmetics, pharmaceutical or animal feed industries. The use of Klüber Summit FG Elite 46 can contribute to increased reliability of your production processes. Nevertheless it is recommended to conduct an additional risk analysis, e.g. HACCP.

### Application

Klüber Summit FG Elite 46 can be used for oil-injected screwtype compressors in the food-processing and pharmaceutical industries.

### Application notes

When selecting the oil viscosity for air compressors, please observe the manufacturers' instructions. Notes on switching from mineral to synthetic oils:

When switching a used compressor to Klüber Summit FG Elite 46, drain old oil from whole circuit of compressor while still warm. We also recommend changing all oil filters and separators. Then refill the compressor with Klüber Summit FG Elite 46. When switching from mineral oil to the synthetic Klüber Summit FG Elite 46 oil, please bear in mind that the compressor may contain oxidation residues in the form of blackened or contaminated oil. Typical symptoms are black discolouration or impurities in the previously used oil. As such residues can affect the service life of the fresh Klüber Summit FG Elite 46, the compressor should be cleaned using the Klüber Summit Varnasolv conditioner.

After changing over to Klüber Summit FG Elite 46, we recommend determining the oil change interval through an oil analysis or the Klüber Summit TAN Kit after approx. 500 to 1,000 operating hours.

For further information please turn to your contact person at Klüber Lubrication or see the product information leaflet on Klüber Summit Varnasolv.

\*The indicated oil change intervals are guide values which are based on practical experience. They depend on the intended use, the application method and the technical condition of the compressor. Lubricants change their condition depending on the mechano-dynamical loads, pressures and temperatures and the mixing with oil residues or build-ups of the previous oils fills. Such changes in product properties may have an effect on the oil change intervals and the function of components.

\*\*These data are based on our current knowledge and experience. Owing to the many different elastomer compositions we recommend checking their compatibility and



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other influencing factors that are relevant for the application with the component and under conditions similar to series application.

#### Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.



Pack sizes	Klüber Summit FG Elite 46
Canister 19 I	+
Drum 208 I	+

Product data	Klüber Summit FG Elite 46
Article number	050136
NSF-H1 registration	150 874
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 46 mm²/s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 7.6 mm²/s
ISO viscosity grade, DIN ISO 3448	46
Demulsifying capacity, DIN 51599, ASTM D 1401, at 54 °C	43/37/3 ml
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 230 °C
Pour point, DIN ISO 3016	<= -34 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months

Product information



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### Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

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The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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