

## Klüber Summit SH 32, 46, 55, 68, 100

Synthetic air compressor oils for oil change intervals up to 10,000 operating hours



### Benefits for your application

- Low maintenance and operating costs due to extended oil change intervals up to 10,000 operating hours in oil-injected screw-type compressors
- Easy compressor oil conversion due to neutral behaviour of oils towards seals
- Low tendency to evaporation and thus low impact of the oil vapour on the compressed air
- Longer service life of the oil filters, activated carbon filters and oil separators
- Low formation of oxidation residues in the oil circuit, reduced operating costs due to extended oil filter and separator life
- Reduction of energy costs due to more energy efficient operation

### Description

Klüber Summit SH oils are air compressor oils based on synthetic hydrocarbon and additives. They can be mixed with mineral oils and synthetic hydrocarbon oils, however are not miscible with polyglycol oils.

### Application

Klüber Summit SH oils have been designed especially for the lubrication of highly loaded, oil-injected screw-type compressors with oil change intervals up to 10,000 operating hours.

Klüber Summit SH oils can also be used for compressors that were previously run with mineral oils. They are neutral towards most elastomer seals used in air compressors, therefore leakage is not to be expected.

Klüber Summit SH 32 is especially suitable for centrifugal compressors and Klüber Summit SH 100 for reciprocating piston compressors.

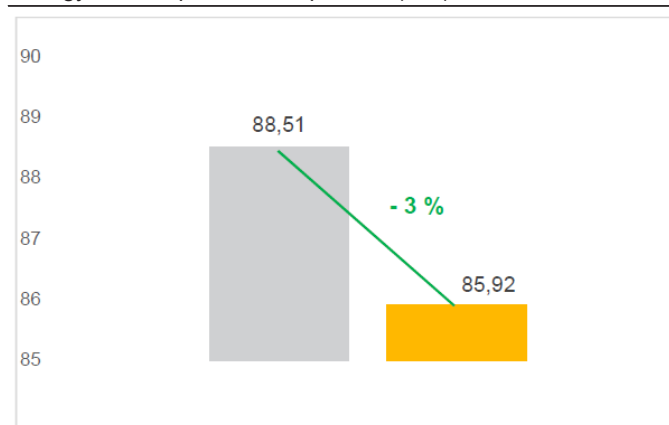
Klüber Summit SH oils offer excellent oxidation stability due to the synthetic base oil, thus minimizing oxidation residues in the compressors and extending oil change intervals and the service life of oil filters and separators. Special inhibitors contained in the oils keep the inside of compressors clean.

Owing to the evaporation stability of the base oil, the oil vapour content in the compressed air can be considerably reduced compared to conventional mineral oils. This contributes to a reduction of oil consumption and clean compressed air; gumming of pneumatic valves in the compressed air circuit can be prevented as well due to the low oil content of the Klüber Summit SH oils.

Consequently, maintenance intervals in your system can be extended, reducing both the strain on resources and disposal costs.

In addition, Klüber Summit SH contributes significantly to the compressor system's energy efficiency compared with conventional mineral compressor oils. Optimised friction behaviour reduces the compressor's internal friction resistance and operating temperature.

Energy consumption of compressor (KW)



Standard Mineral Oil (VG 46) Klüber Summit SH 46

[Test parameters: screw-type compressor; output pressure 7.5 bar; discharge temperature 85 °C; input pressure atmospheric, input temperature 15 °C]

Multiple tests at various compressor systems operated by customers have shown energy savings up to 5 % of electric power consumption during operation as well as an increase in compressed air flow due to the lower compressor temperature.

The resulting energy savings help you reduce your costs and attain your sustainability goals.

# Klüber Summit SH 32, 46, 55, 68, 100

Synthetic air compressor oils for oil change intervals up to 10,000 operating hours

## Application notes

When selecting the oil viscosity for air compressors please observe the manufacturers' instructions.

When switching a used compressor to a Klüber Summit SH oil, 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 SH oil.

When switching from mineral oil to a synthetic Klüber Summit SH oil please consider that the compressor may contain oxidation residues in the form of blackened or contaminated oil. As such residues can affect the service life of the fresh Klüber Summit SH oil, the compressor should be cleaned using the Klüber Summit Varnasolv conditioner (cf. product information leaflet).

Your contact persons at Klüber Lubrication would be pleased to provide further information.

After switching to a Klüber Summit SH oil we recommend determining the oil change interval through an oil analysis or the Klüber Summit TAN Kit.

## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	Klüber Summit SH 32	Klüber Summit SH 46	Klüber Summit SH 55	Klüber Summit SH 68	Klüber Summit SH 100
Canister 5 l	-	+	-	-	-
Canister 20 l	+	+	+	+	+
Drum 200 l	+	+	+	+	+

Product data	Klüber Summit SH 32	Klüber Summit SH 46	Klüber Summit SH 55	Klüber Summit SH 68	Klüber Summit SH 100
Article number	050004	050005	050160	050006	050007
Colour space	colourless	colourless	colourless	colourless	colourless
Appearance	clear	clear	clear	clear	clear
Density, DIN 51757, 20 °C	approx. 0.85 g/cm <sup>3</sup>	approx. 0.85 g/cm <sup>3</sup>	approx. 0.86 g/cm <sup>3</sup>	approx. 0.86 g/cm <sup>3</sup>	approx. 0.86 g/cm <sup>3</sup>
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 32 mm <sup>2</sup> /s	approx. 46 mm <sup>2</sup> /s	approx. 55 mm <sup>2</sup> /s	approx. 68 mm <sup>2</sup> /s	approx. 100 mm <sup>2</sup> /s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 5.8 mm <sup>2</sup> /s	approx. 7.3 mm <sup>2</sup> /s	approx. 8.7 mm <sup>2</sup> /s	approx. 9.8 mm <sup>2</sup> /s	approx. 13.1 mm <sup>2</sup> /s
Viscosity index, DIN ISO 2909	>= 115	>= 115	>= 115	>= 115	>= 115
Foam test, ASTM-D 892, ISO 6247, sequence I/24 °C	50/0 ml	<= 50/0 ml	50/0 ml	50/0 ml	50/0 ml
Foam test, ASTM-D 892, ISO 6247, sequence II/ 93.5 °C	50/0 ml	<= 50/0 ml	50/0 ml	50/0 ml	50/0 ml
Foam test, ASTM D 892, ISO 6247, sequence III/24°C	50/0 ml	<= 50/0 ml	50/0 ml	50/0 ml	50/0 ml
Demulsifying capacity, DIN 51599, ASTM D 1401, at 54 °C	40/37/3 ml	40/37/3 ml	40/37/3 ml	40/37/3 ml	
Demulsifying capacity, DIN ISO 6614, ASTM D 1401 at 82 °C					40/37/3 ml



Product data	Klüber Summit SH 32	Klüber Summit SH 46	Klüber Summit SH 55	Klüber Summit SH 68	Klüber Summit SH 100
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	$\geq 230\text{ °C}$	$\geq 240\text{ °C}$	$\geq 240\text{ °C}$	$\geq 240\text{ °C}$	$\geq 240\text{ °C}$
Copper corrosion, DIN EN ISO 2160, 24 h/100°C	1 - 100 corrosion degree	1 - 100 corrosion degree	1 - 100 corrosion degree	1 - 100 corrosion degree	1 - 100 corrosion degree
Pour point, DIN ISO 3016	$\leq -51\text{ °C}$	$\leq -36\text{ °C}$	$\leq -36\text{ °C}$	$\leq -36\text{ °C}$	$\leq -33\text{ °C}$
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	60 months	60 months	60 months



## Klüber Summit SH 32, 46, 55, 68, 100

Synthetic air compressor oils for oil change intervals up to 10,000 operating hours

---

### 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.

**Klüber Lubrication München SE & Co. KG /  
Geisenhausenerstraße 7 / 81379 München / Germany /  
phone +49 89 7876-0 / fax +49 89 7876-333.**

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.

Publisher and Copyright: Klüber Lubrication München SE & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München SE & Co. KG and if source is indicated and voucher copy is forwarded.