Klüber Summit SH 32, 46, 55, 68, 100

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

Your benefits at a glance

- 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 servie 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
- Surpasses the requirements of DIN 51506-VDL and ISO 6743-3 L-DAJ (VG 32/46/55/68) / L-DAB (VG 100)

Your requirements - our solution

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.

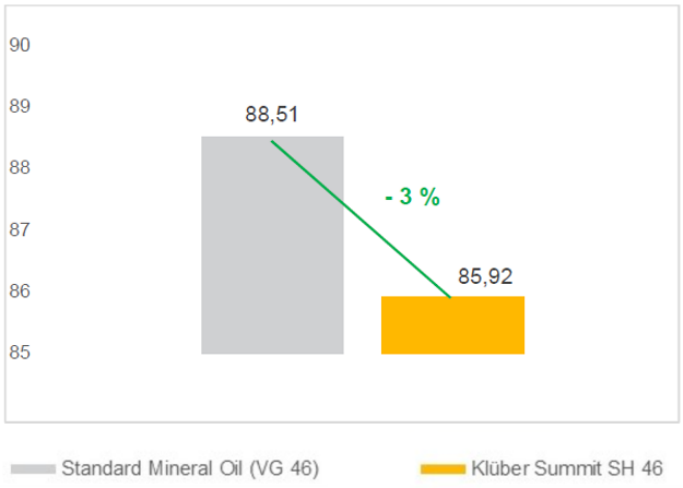
Klüber Summit SH oils offer excellent oxidation stability due to the synthetic base oil, thus minimizing oxidation residues in the compressors and extending oil change intervals and the service life of oil filters and separators. Special inhibitors contained in the oils keep the inside of compressors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



[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

Klüber Summit SH 32, 46, 55, 68, 100

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

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.

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 pleases to provide further information.

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

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 SH 32	Klüber Summit SH 46	Klüber Summit SH 55	Klüber Summit SH 68
Canister 20 l	+	+	+	+
Bucket 19 l		+		+
Drum 200 l	+	+	+	+
Drum 208 l	+	+		+

Pack sizes	Klüber Summit SH 100
Canister 20 l	+
Bucket 19 l	+
Drum 200 l	+
Drum 208 l	+

Characteristics	Klüber Summit SH 32	Klüber Summit SH 46	Klüber Summit SH 55	Klüber Summit SH 68
Article number	050004	050005	050160	050006
Appearance	clear	clear	clear	clear
Colour space	colourless	colourless	colourless	colourless
Demulsifying capacity, DIN ISO 6614 /ASTM D1401, 54°C	40-37-3 (30) ml (min)	40-37-3 (30) ml (min)	40-37-3 (30) ml (min)	40-37-3 (30) ml (min)
Demulsifying capacity, DIN ISO 6614 /ASTM D1401, 82°C				
Density, DIN 51757, 20°C	approx. 0.85 g/cm³	approx. 0.85 g/cm³	approx. 0.86 g/cm³	approx. 0.86 g/cm³

Klüber Summit SH 32, 46, 55, 68, 100

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

Characteristics	Klüber Summit SH 32	Klüber Summit SH 46	Klüber Summit SH 55	Klüber Summit SH 68
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 230 °C	≥ 240 °C	≥ 240 °C	≥ 240 °C
Foam test, ISO 6247 / ASTM D892, 24°C, sequence I	50/0 ml	≤ 50/0 ml	50/0 ml	50/0 ml
Foam test, ISO 6247 / ASTM D892, 24°C, sequence III	50/0 ml	≤ 50/0 ml	50/0 ml	50/0 ml
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence II	50/0 ml	≤ 50/0 ml	50/0 ml	50/0 ml
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 5.8 mm²/s	approx. 7.7 mm²/s	approx. 8.7 mm²/s	approx. 9.8 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 32 mm²/s	approx. 46 mm²/s	approx. 55 mm²/s	approx. 68 mm²/s
Viscosity index, DIN ISO 2909	≥ 115	≥ 115	≥ 115	≥ 115
Copper corrosion, DIN EN ISO 2160, 24 h, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Pour point, DIN ISO 3016	≤ -51 °C	≤ -36 °C	≤ -36 °C	≤ -36 °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

Characteristics	Klüber Summit SH 100
Article number	050007
Appearance	clear
Colour space	colourless
Demulsifying capacity, DIN ISO 6614 /ASTM D1401, 54°C	
Demulsifying capacity, DIN ISO 6614 /ASTM D1401, 82°C	40-37-3 (60) ml (min)
Density, DIN 51757, 20°C	approx. 0.86 g/cm³
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 240 °C
Foam test, ISO 6247 / ASTM D892, 24°C, sequence I	50/0 ml
Foam test, ISO 6247 / ASTM D892, 24°C, sequence III	50/0 ml
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence II	50/0 ml
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 13.1 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 100 mm²/s
Viscosity index, DIN ISO 2909	≥ 115

Klüber Summit SH 32, 46, 55, 68, 100

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

Characteristics	Klüber Summit SH 100
Copper corrosion, DIN EN ISO 2160, 24 h, 100°C	1 - 100 - 24 corrosion degree
Pour point, DIN ISO 3016	≤ -33 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months

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 90 years.

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