

Semi-synthetic air compressor oils for oil change intervals up to 5,000 operating hours

#### Your benefits at a glance

- Low maintenance and operating costs due to oil change intervals up to 5,000 operating hours inoil-injected screw-type compressors
- Easier compressor oil changeover due to neutral behaviour of oils towards seals
- Good soil dissolving capacity, clean oil circuit due to the ester content in the oil, reduction of cleaning costs
- · Low formation of oxidation residues in the oil circuit, reduced operating costs due to extended oil filter and separator life
- Complies with the requirements of DIN 51506-VDL and ISO 6743-3 L-DAJ (VG 32/46/68) / L-DAB (VG 100/150)

#### Your requirements - our solution

Klüber Summit PS oils are air compressor oils based on hydrogenated mineral oil, synthetic ester oil and additives. Klüber Summit PS oils are miscible with mineral oils and synthetic hydrocarbons, but not with oils based on polyglycol.

### Application

Klüber Summit PS oils have been especially designed for the lubrication of screw-type and reciprocating piston compressors. They are used for oil change intervals up to 5,000 operating hours in oil-injected screw-type compressors.

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

Klüber Summit PS oils are used for compressors which do not achieve the desired maintenance intervals when using mineral oils and where the use of fully synthetic oils would be uneconomical due to ingress of contamination or a low number of operating hours per year.

Klüber Summit PS 100 can also be used for the lubrication of turbocompressors, whereas Klüber Summit PS 300 and 400 have been especially developed for reciprocating piston compressors.

Klüber Summit PS oils offer good oxidation stability due to the synthetic base oil content, thus minimising oxidation residues in the compressors and extending oil change intervals and the service life of oil filters and separators. Special inhibitors contained in the oil keep the inside of compressors clean and ensure a high efficiency.

### **Application notes**

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

When switching a used compressor to Klüber Summit PS oils, drain the old oil from the whole circuit while still warm. We also recommend changing all oil filters and separators. Then refill the compressor with Klüber Summit PS oil.

When switching from mineral oil to a Klüber Summit PS 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 PS oil, the compressor should be cleaned using the Klüber Summit Varnasolv conditioner.

For further information, please consult the Klüber Summit Varnasolv product information leaflet or contact Klüber Lubrication.

After switching to a Klüber Summit PS 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	Klüber Summit	Klüber Summit	Klüber Summit
	PS 100	PS 150	PS 200	PS 300
Canister 950 ml				+





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Pack sizes	Klüber Summit PS 100	Klüber Summit PS 150	Klüber Summit PS 200	Klüber Summit PS 300
Canister 1 I				+
Canister 5 I		+	+	+
Canister 20 I		+	+	
Bucket 19 I	+	+	+	+
Drum 200 l		+	+	
Drum 208 I	+	+	+	+
Container 1000 l		+		

Pack sizes	Klüber Summit PS 400
Canister 950 ml	+
Canister 1 I	+
Canister 5 I	
Canister 20 I	
Bucket 19 I	+
Drum 200 l	
Drum 208 I	+
Container 1000 I	

Characteristics	Klüber Summit PS 100	Klüber Summit PS 150	Klüber Summit PS 200	Klüber Summit PS 300
Article number	050052	050053	050054	050055
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)	
Demulsifying capacity, DIN ISO 6614 /ASTM D1401, 82°C				40-37-3 (60) ml (min)
Density, DIN 51757, 20°C	approx. 0.87 g/cm <sup>3</sup>	approx. 0.87 g/cm <sup>3</sup>	approx. 0.87 g/cm <sup>3</sup>	approx. 0.88 g/cm <sup>3</sup>
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 200 °C	≥ 210 °C	≥ 230 °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





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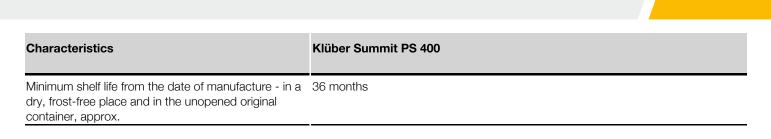
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Characteristics	Klüber Summit PS 100	Klüber Summit PS 150	Klüber Summit PS 200	Klüber Summit PS 300
ISO viscosity grade, DIN ISO 3448, ISO VG	32	46	68	100
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 5.5 mm²/s	approx. 6.8 mm²/s	approx. 8.4 mm²/s	approx. 11.6 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. 68 mm²/s	approx. 100 mm²/s
Viscosity index, DIN ISO 2909	≥ 90	≥ 90	≥ 90	≥ 90
Copper corrosion, DIN EN ISO 2160, 3 h, 100°C	1 - 100 - 3 corrosion degree			
Pour point, DIN ISO 3016	≤ -30 °C	≤ -30 °C	≤ -27 °C	≤ -30 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months		36 months

Characteristics	Klüber Summit PS 400
Article number	050056
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. 0.88 g/cm <sup>3</sup>
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	≤ 50/0 ml
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence	e ≤ 50/0 ml
ISO viscosity grade, DIN ISO 3448, ISO VG	150
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 14.3 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 150 mm²/s
Viscosity index, DIN ISO 2909	≥ 90
Copper corrosion, DIN EN ISO 2160, 3 h, 100°C	1 - 100 - 3 corrosion degree
Pour point, DIN ISO 3016	≤ -27 °C



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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 90 years.

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