

## Klüber Summit DSL 32, 46, 68, 100, 125

Fully synthetic air compressor oils for oil change intervals up to 8,000 operating hours



## Benefits for your application

- Low maintenance and operating costs due to oil change intervals up to 8,000 operating hours in oil-injected screw-type compressors
- Easier compressor oil conversion 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
- Klüber Summit DSL 32, 46, 68 and 100 are biodegradable oils and can be used for sensitive applications like sewage plants

### Description

Klüber Summit DSL oils are air compressor oils based on a synthetic ester oil and additives. They can be mixed with mineral oils, synthetic hydrocarbon oils and polyglycol oils.

#### Application

The Klüber Summit DSL 32 ... 68 oils have been especially designed for oil change intervals up to 8,000 operating hours\* in oil-injected screw-type compressors. Klüber Summit DSL 32 and 46 can also be used for the lubrication of centrifugal compressors, whereas Klüber Summit DSL 68 ... 125 is particularly suitable for the lubrication reciprocating piston compressors.

Klüber Summit DSL oils are 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 DSL 32 oils are mainly used in reciprocating piston compressors which do not achieve the desired maintenance intervals when using mineral oils or which show severe residue formation (carbon buildups) on valves and in the compression chamber. Klüber Summit DSL 32, 46, 68 and 100 are biodegradable acc. to CEC-L-33-A-93 and can therefore be used in eco-sensitive applications.

Klüber Summit DSL oils offer good 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 (screw-type compressors) and valves (reciprocating piston compressors).

### Application notes

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

When switching a used compressor to a Klüber Summit DSL 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 DSL oil.

When switching from mineral oil to a synthetic Klüber Summit DSL 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 DSL 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 DSL 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 downloaded or requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

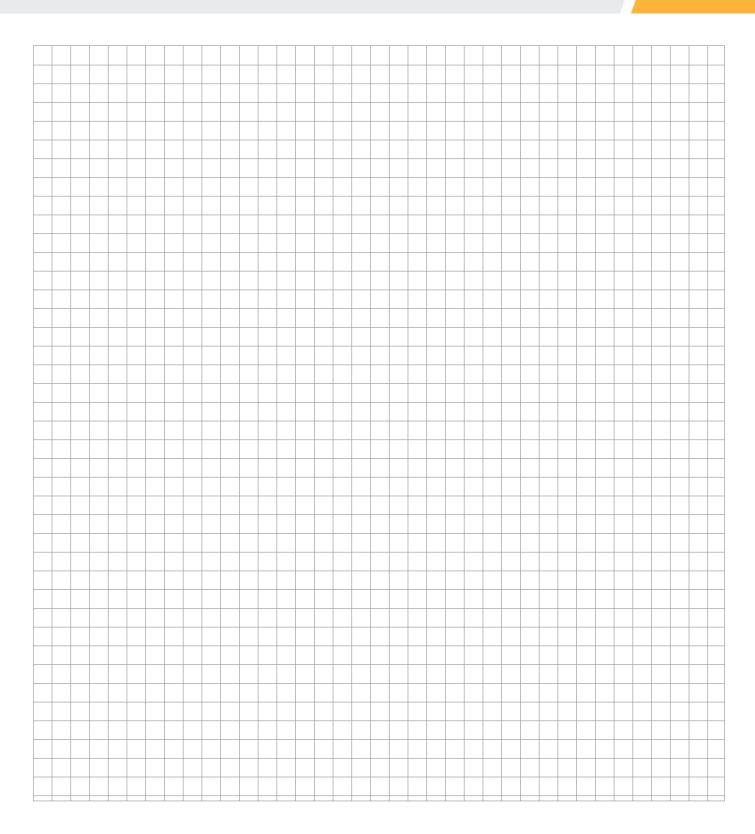
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| Pack sizes    | Klüber<br>Summit DSL<br>32 | Klüber<br>Summit DSL<br>46 | Klüber<br>Summit DSL<br>68 | Klüber<br>Summit DSL<br>100 | Klüber<br>Summit DSL<br>125 |
|---------------|----------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|
| Canister 19 I | +                          | -                          | +                          | +                           | +                           |
| Drum 208 I    | +                          | =                          | +                          | +                           | +                           |

| Product data   | Klüber<br>Summit DSL<br>46     | Klüber<br>Summit DSL<br>32     | Klüber<br>Summit DSL<br>68     | Klüber<br>Summit DSL<br>100     | Klüber<br>Summit DSL<br>125     |
|--|--------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|
| Article number   | 050064                         | 050000                         | 050001                         | 050002                          | 050003                          |
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C   | approx. 5.7 mm <sup>2</sup> /s | approx. 5.8 mm <sup>2</sup> /s | approx. 8.3 mm <sup>2</sup> /s | approx. 10.7 mm <sup>2</sup> /s | approx. 13.4 mm <sup>2</sup> /s |
| Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C  | approx. 46 mm <sup>2</sup> /s  | approx. 32 mm <sup>2</sup> /s  | approx. 68<br>mm²/s            | approx. 100 mm <sup>2</sup> /s  | approx. 125<br>mm²/s            |
| Viscosity index, DIN ISO 2909  | >= 50                          | >= 70                          | >= 90                          | >= 90                           | >= 90                           |
| Density, DIN 51757, 20 °C  | approx. 0.97 g/cm <sup>3</sup> | approx. 0.94 g/cm <sup>3</sup> | approx. 0.96 g/cm <sup>3</sup> | approx. 0.96 g/cm <sup>3</sup>  | approx. 0.96 g/cm <sup>3</sup>  |
| Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus  | >= 240 °C                      | >= 220 °C                      | >= 240 °C                      | >= 250 °C                       | >= 250 °C                       |
| Pour point, DIN ISO 3016   | <= -39 °C                      | <= -42 °C                      | <= -36 °C                      | <= -30 °C                       | <= -30 °C                       |
| Copper corrosion, DIN EN ISO 2160, 24 h/100°C  | 1 - 100<br>corrosion<br>degree | 1 - 100<br>corrosion<br>degree | 1 - 100<br>corrosion<br>degree | 1 - 100<br>corrosion<br>degree  | 1 - 100<br>corrosion<br>degree  |
| 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                      | 40/37/3 ml                      |
| Colour space   | yellow                         | yellow                         | yellow                         | yellow                          | yellow                          |
| 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                       |

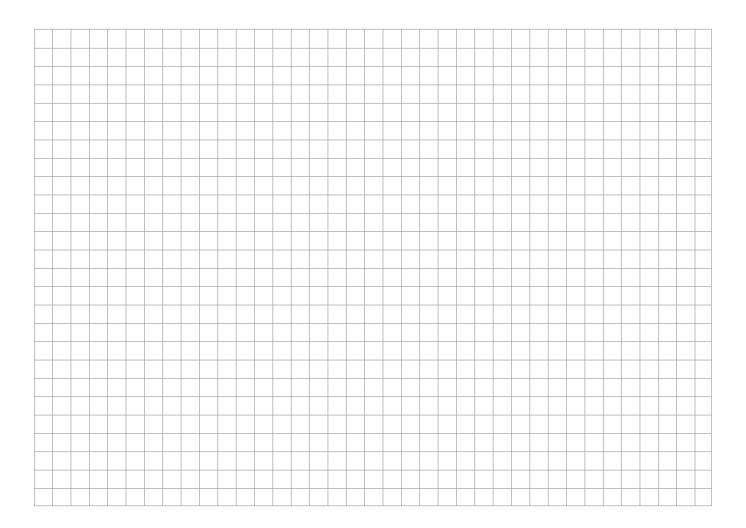






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#### Klüber Lubrication – your global specialist

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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