

# Klüber Summit RPS 52

Synthetic compressor oil based on polyglycol for ammonia refrigerating plants using dry evaporation



## Benefits for your application

- Low maintenance costs due to extended oil change intervals and reduced oil consumption
- Reliable operation of the compressor due to stable viscosity under the influence of refrigerants
- High efficiency of the refrigerating plants due to reduced oil deposits
- Low operating costs due to long service life of filters and oil separators
- Simplified system configuration as the product can be used with dry evaporation

#### Description

Klüber Summit RPS 52 is a refrigeration compressor oil based on polyglycol which shows a good miscibility with ammonia. The synthetic base oil ensures good cold flow properties, a high chemical stability to ammonia and low tendency to evaporation.

Application

Klüber Summit RPS 52 has been designed especially for the lubrication of screw-type compressors in refrigerating plants using ammonia (R 717) and dry evaporation.

Unlike mineral oils and polyalphaolefins, Klüber Summit RPS 52 is miscible with ammonia, thus the oil entrained in the refrigeration cycle is recycled to the compressor together with the refrigerant. Therefore, it is no longer necessary to have oil catches in the refrigeration cycle, like in the case of non-miscible oils. Especially in the evaporator of the refrigeration cycle such miscibility helps to reliably recycle the oil to the compressor at low evaporator temperatures.

Owing to the synthetic base oil of Summit RPS 52 oil carryover into the refrigeration cycle is much lower than with conventional mineral oils. Therefore, oil-related problems in the refrigeration cycle are prevented right from the beginning.

The base oil of Klüber Summit RPS 52 stands out for its stability to ammonia – the typical blackening of conventional mineral oils or deposits in the refrigeration cycle are prevented and oil change intervals can be extended considerably.

Our experience gained in practice has shown that Klüber Summit RPS 52 can be used for evaporating temperatures as low as -40°C depending on the operating conditions. Klüber Summit RPS 52 protects against wax-like deposits, thus increasing the efficiency of the refrigeration plant.

## Application notes

Drain old oil from whole circuit of the refrigeration compressor while still warm. We recommend changing all oil filters and separators and draining the oil catches of the refrigeration cycle completely. Then recharge compressor with Klüber Summit RPS 52.

Klüber Summit RPS 52 is not miscible with mineral oils or polyalphaolefins. When switching from mineral oils to Klüber Summit RPS 52, thoroughly flush and clean the compressor. Klüber Lubrication would be pleased to provide further advice.

Klüber Summit RPS 52 is hygroscopic (water absorbing). The compressor should be filled rapidly and with care.

Keep original container well closed during storage.

#### 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 RPS 52
Canister 19 I	+
Drum 208 I	+



## Klüber Summit RPS 52

Synthetic compressor oil based on polyglycol for ammonia refrigerating plants using dry evaporation

Product data	Klüber Summit RPS 52
Article number	050062
NSF-H1 registration	146 736
Colour space	colourless
Appearance	clear
Density, DIN 51757, 20 °C	approx. 1.03 g/cm³
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 52 mm²/s
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 11.1 mm²/s
Viscosity index, DIN ISO 2909	>= 200
Pour point, DIN ISO 3016	<= -34 °C
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 210 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 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 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.