# KLÜBER SUMMIT R 200 (PAIL: 20 LTR)

Product group: **683** Product number: **210210** 

Klüber Summit R 200 is a fully synthetic refrigeration compressor oil designed for ammonia and CO<sub>2</sub> systems, offering excellent thermal and chemical stability across a wide temperature range.



#### **Product information**

Klüber Summit R oils are fully synthetic high-performance lubricants especially developed for heavily loaded ammonia refrigerators and heat pumps. The Klüber Summit R series is characterised especially by its high chemical and thermal stability attained with the carefully selected base oils on the basis of polyalphaolefins. Depending on the system design, Klüber Summit R products might also be successfully used with carbon dioxide (R744). The Klüber Summit R series has a high viscosity index, good shear stability and excellent low-temperature flow behaviour, giving the products large reserve capacity compared with the mineral oils available on the market. Furthermore, the Klüber Summit R series is characterised by low solubility in R717 and R 744. This enables higher film thickness in the lubrication point, contributing to reliable, low-wear compressor operation. The Klüber Summit R series can be used at high operating temperatures and in refrigerators with very low evaporator temperatures.

#### Features

- Developed for heavily loaded ammonia refrigerators and heat pumps.
- · Higher refrigerator efficiency due to lower oil content in the refrigerant and very good flow characteristics at low temperatures
- Klüber Summit R products might also be successfully used with carbon dioxide (R744)

#### **Benefits**

- · Excellent thermal and chemical stability
- Low product solubility in ammonia
- Separation of the oil/ NH3 mixture in the separator is very good
- Lower operating costs due to long oil filter and oil separator lifetimes

## **Specification**

## General

| Invent Hazard Material (IMO/EJ) classification | C-3 |
|--|-----|
|  |     |

## Physical properties

| Appearance  | clear           |
|---|-----------------|
| Colour  | coulourless     |
| Density at 20°C [g/cm³]   | ~ 0.83<br>g/cm³ |
| Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D7042, 100 °C [mm²/s] | ~ 10 mm²/s      |
| Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D7042, 40 °C [mm²/s]  | ~ 68 mm²/s      |

## Dimensions/Weight

| Packing Size | 20 LTR |
|--------------|--------|
|--------------|--------|

# Technical data

| Shelf life [months]          | 36    |
|------------------------------|-------|
| Viscosity index, DINISO 2909 | ≥ 130 |

## Performance data

| Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus [°C] | ≥ 230 °C |
|--|----------|
| Pour point, DINISO 3016 [°C]                                     | ≤-51 °C  |

## **Documents**

**SDoC** 

## **Directions for use**