



# KÄLTEMASCHINENOEL BSE 85 K

## Refrigeration Oil for CO<sub>2</sub> Compressors

### Description

Kältemaschinenoel BSE 85 K is a special synthetic refrigeration oil based on synthetic esters. Selected additives guarantee excellent wear protection, also under the influence of CO<sub>2</sub> in the compressor. Kältemaschinenoel BSE 85 K has an excellent solubility / miscibility with the refrigerant carbon dioxide (R 744).

### Application

Kältemaschinenoel BSE 85 K was developed for use mainly in refrigeration systems (deep-temperature systems, cascades, etc.) which are working with the refrigerant CO<sub>2</sub> (R 744). Kältemaschinenoel BSE 85 K has an excellent solubility / miscibility with CO<sub>2</sub> which guarantees the oil circulation in the refrigeration system, especially at low evaporation temperatures. Kältemaschinenoel BSE 85 K can be used in almost any application in industrial and commercial refrigeration, e.g. large-scale cooling plants. Kältemaschinenoel BSE 85 K can also be used in transcritical CO<sub>2</sub> cycles, e.g. air conditioning and heat pump systems, as well as container cooling systems.

### Advantages

- High thermal stability
- High chemical stability with CO<sub>2</sub> refrigerant
- Excellent miscibility with CO<sub>2</sub> – also at low temperatures
- Excellent low-temperature flowability
- Excellent lubrication at high pressure levels under CO<sub>2</sub> atmosphere





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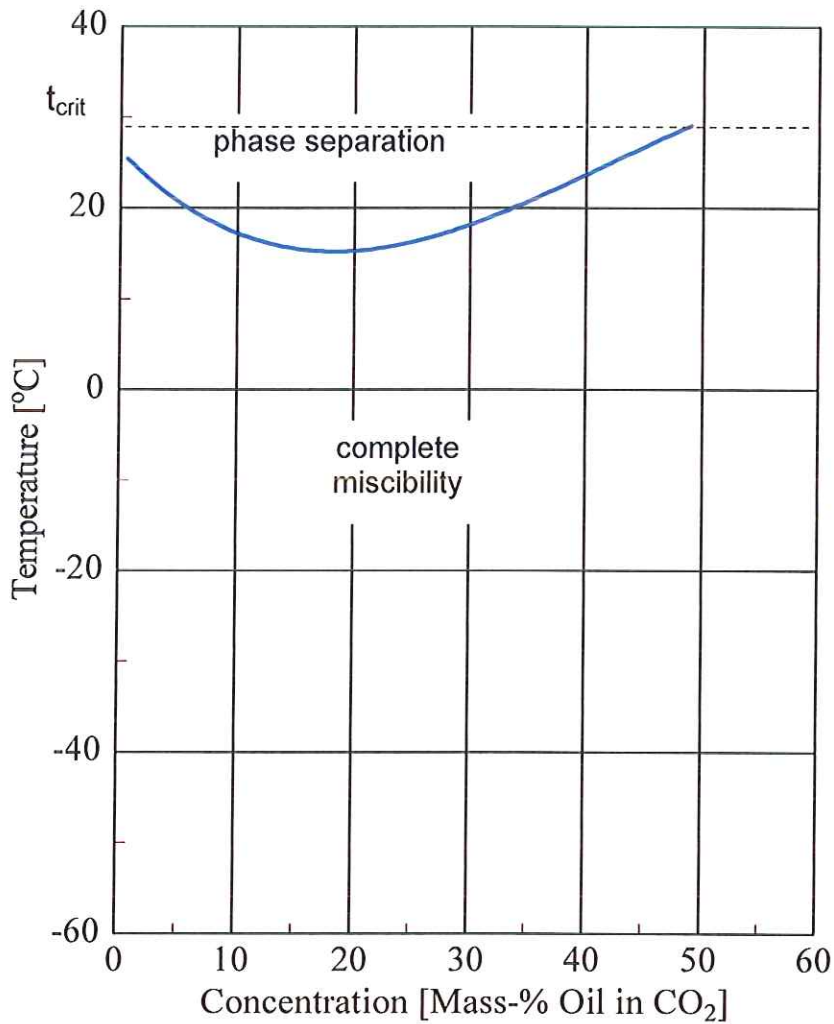
### Typical technical data:

Properties	Unit		Test Method
Colour		0.5	DIN ISO 2049
Density at 15°C	kg/m <sup>3</sup>	993	DIN 51 757
Flashpoint	°C	246	DIN ISO 2592
Kinematic viscosity at 40°C	mm <sup>2</sup> /s	80	DIN EN ISO 3104
at 100°C	mm <sup>2</sup> /s	10.6	
Viscosity index	-	118	DIN ISO 2909
Pour point	°C	-42	DIN ISO 3016
Neutralization number	mgKOH/g	0.02	DIN 51 558-3
Water content	mg/kg	< 30	DIN 51 777-2



# KÄLTEMASCHINENOEL BSE 85 K Refrigeration Oil for CO<sub>2</sub> Compressors

Miscibility gap: Kältemaschinenöl BSE 85 K – CO<sub>2</sub>





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Kinematic viscosity and vapour pressure: Kältemaschinenöl BSE 85 K – CO<sub>2</sub>

