

RENISO C 85 E

Synthetic refrigeration oil for CO₂ compressors

Description

RENISO C 85 E is a special synthetic refrigeration oil based on synthetic esters. Selected additives guarantee excellent wear protection, also under the influence of CO₂ in the compressor. RENISO C 85 E has an excellent solubility / miscibility with the refrigerant carbon dioxide (R 744).

Application

RENISO C 85 E was developed for use mainly in refrigeration systems (deep-temperature systems, cascades, etc.) which are working with the refrigerant CO₂ (R 744). RENISO C 85 E has an excellent solubility / miscibility with CO₂ which guarantees the oil circulation in the refrigeration system, especially at low evaporation temperatures. RENISO C 85 E can be used in almost any application in industrial and commercial refrigeration, e.g. large-scale cooling plants. RENISO C 85 E can also be used in transcritical CO₂ cycles, e.g. air conditioning and heat pump systems, as well as container cooling systems.

Specifications

RENISO C 85 E is a refrigeration oil acc. to DIN 51503: KB – refrigeration oils for CO₂.

NSF H2 registration:
registration no. 146755

Advantages

- High thermal stability
- High chemical stability with CO₂ refrigerant
- Excellent miscibility with CO₂ – also at low temperatures
- Excellent deep-temperature flowability
- Excellent lubrication at high pressure levels under CO₂ atmosphere
- Excellent experience in test facilities and prototype systems
- Used by leading compressor manufacturers.

Approvals:

DORIN
GEA BOCK
GEA GRASSO
JOHNSON CONTROLS INTERNATIONAL

RENISO C 85 E

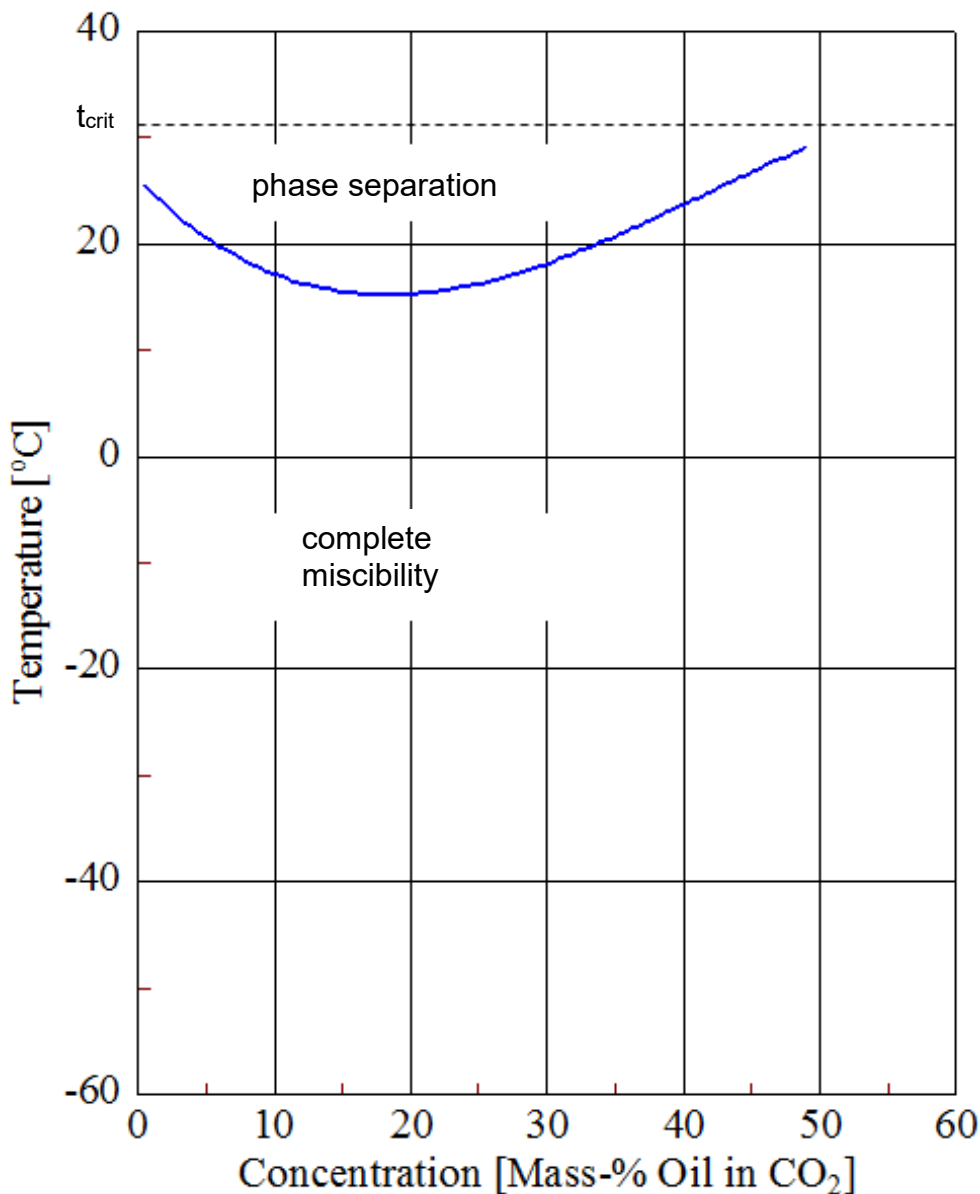
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Typical technical data:

Properties	Unit	RENISO C 85 E	Test method
Colour		0.5	DIN ISO 2049
Density at 15 °C	kg/m ³	993	DIN 51757
Flashpoint	°C	246	DIN ISO 2592
Kinematic viscosity at 40 °C	mm ² /s	80	DIN EN ISO 3104
at 100 °C	mm ² /s	10.6	
Viscosity index	-	118	DIN ISO 2909
Pourpoint	°C	-42	DIN ISO 3016
Neutralisation number	mgKOH/g	0.03	DIN 51558-1
Water content	mg/kg	< 30	DIN 51777-2

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Miscibility behaviour (miscibility gap): RENISO C 85 E and CO₂



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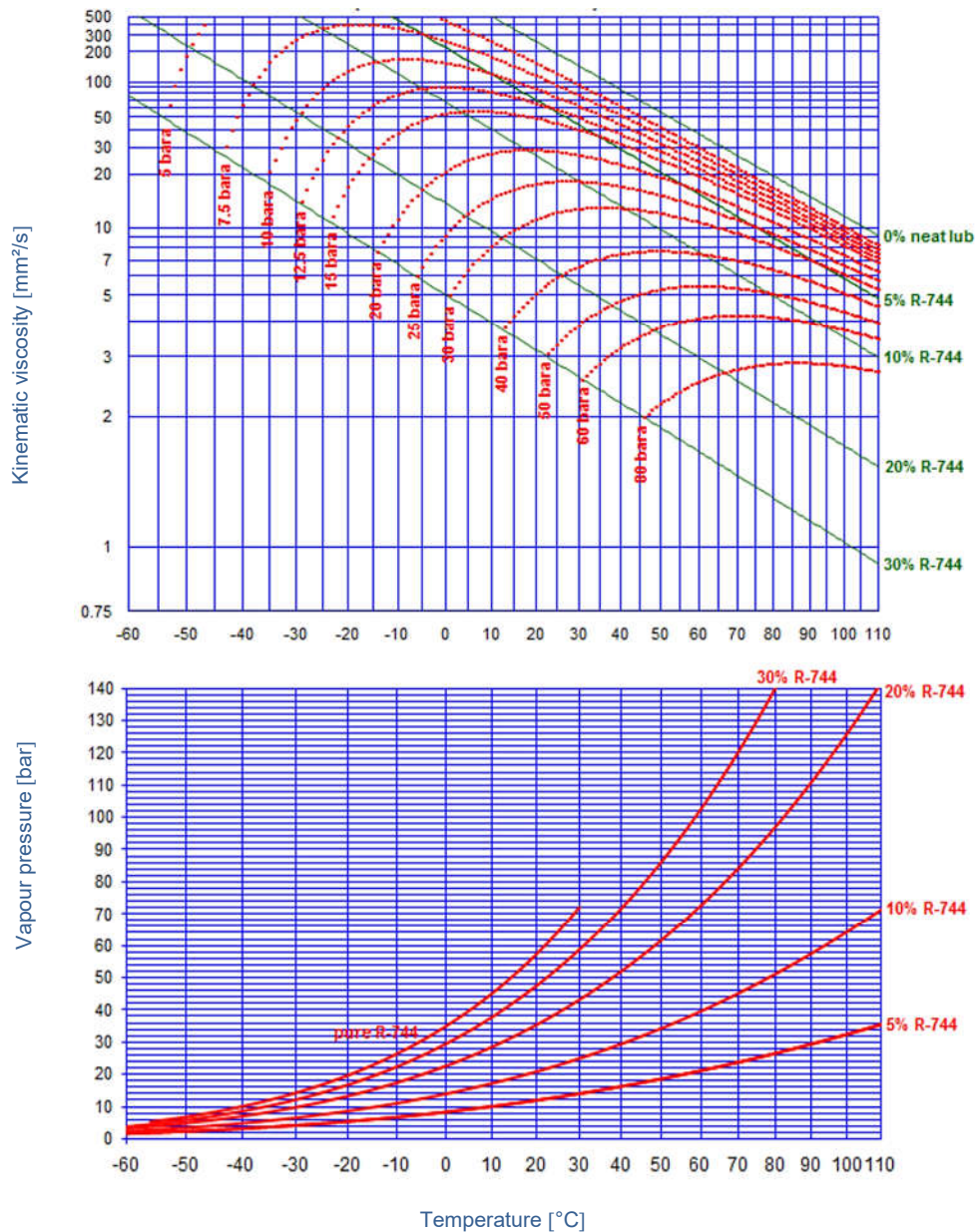
TS 504287 FM 58508 FM 609812 OHS 575079 EMS 71162 ENMS 621315

Health, Safety and Environment - information is provided for products in the relevant Safety Data Sheet. This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products.

While the information and figures given here are typical of current production and conform to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products

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Kinematic viscosity and vapour pressure: RENISO C 85 E and CO₂



All % figures represent mass % oil in the refrigerant.