

RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Description

The refrigeration oil RENISO TRITON SE 220 is based on synthetic polyol ester that were especially developed for use with chlorine-free, fluorinated hydrocarbons. RENISO TRITON SE 220 refrigeration oil is miscible and compatible with HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Application

The RENISO TRITON SE 220 is outstandingly suited for all refrigeration circuits, in which chlorine-free HFC/FC refrigerants, e.g., R134a, R404A or R410A are used. RENISO TRITON SE 220 refrigeration oil is also suitable for HFO and HFO/HFC refrigerants. Depending on the viscosity the refrigeration oil is recommended for hermetical, semi-hermetical and open piston compressors and for screw-type and turbo-compressors. RENISO TRITON SE 220 is especially suitable for deep-freeze systems operating with R23.

RENISO TRITON SE 220 product is also suitable for hydrocarbon refrigerants (e.g. propane, propylene, isobutane) and R22. If RENISO TRITON SE 220 is used with the above mentioned HC refrigerant its recommend to contact the FUCHS application engineers.

Specifications

RENISO TRITON SE 220 lubricant fulfill and exceed the requirements acc. to DIN 51503-1, Groups KC, KD, KE.

Advantages/ Benefits

- Special synthetic polyol ester
- Stable lubrication film even at high temperatures, outstanding lubricity
- Excellent miscibility with HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends
- Very high thermal and chemical stability in the presence of fluorinated refrigerants
- Good viscosity-temperature behavior
- Excellent cold temperature flowability
- Secure oil return from the system, good heat transfer
- Good compatibility with elastomers and materials normally used in refrigeration circuits
- Approved by leading compressor manufacturers
- Ultra-dried

Note

Because of their chemical structure, ester-based oils tend to absorb water. For this reason, RENISO TRITON SE 220 should be in contact with ambient air only for a short time. When opened, the content should be used up in short time.

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Typical technical data:

Product name		RENISO TRITON SE 220	
Property	Unit		Test method
Density at 15 °C	kg/m ³	976	DIN 51757
Flashpoint	°C	294	DIN ISO 2592
Colour	ASTM	0.5	DIN ISO 2049
Kinematic viscosity at 40 °C	mm ² /s	220	DIN EN ISO 3104
at 100 °C	mm ² /s	19.0	
Viscosity index	-	98	DIN ISO 2909
Pourpoint	°C	-27	DIN ISO 3016
Neutralisation number	mgKOH/g	0.03	DIN 51558-1
Water content	mg/kg	< 50	DIN 51777-2

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Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1224yd

temperature [°C]

100

complete miscibility between
-60°C and +100°C

80

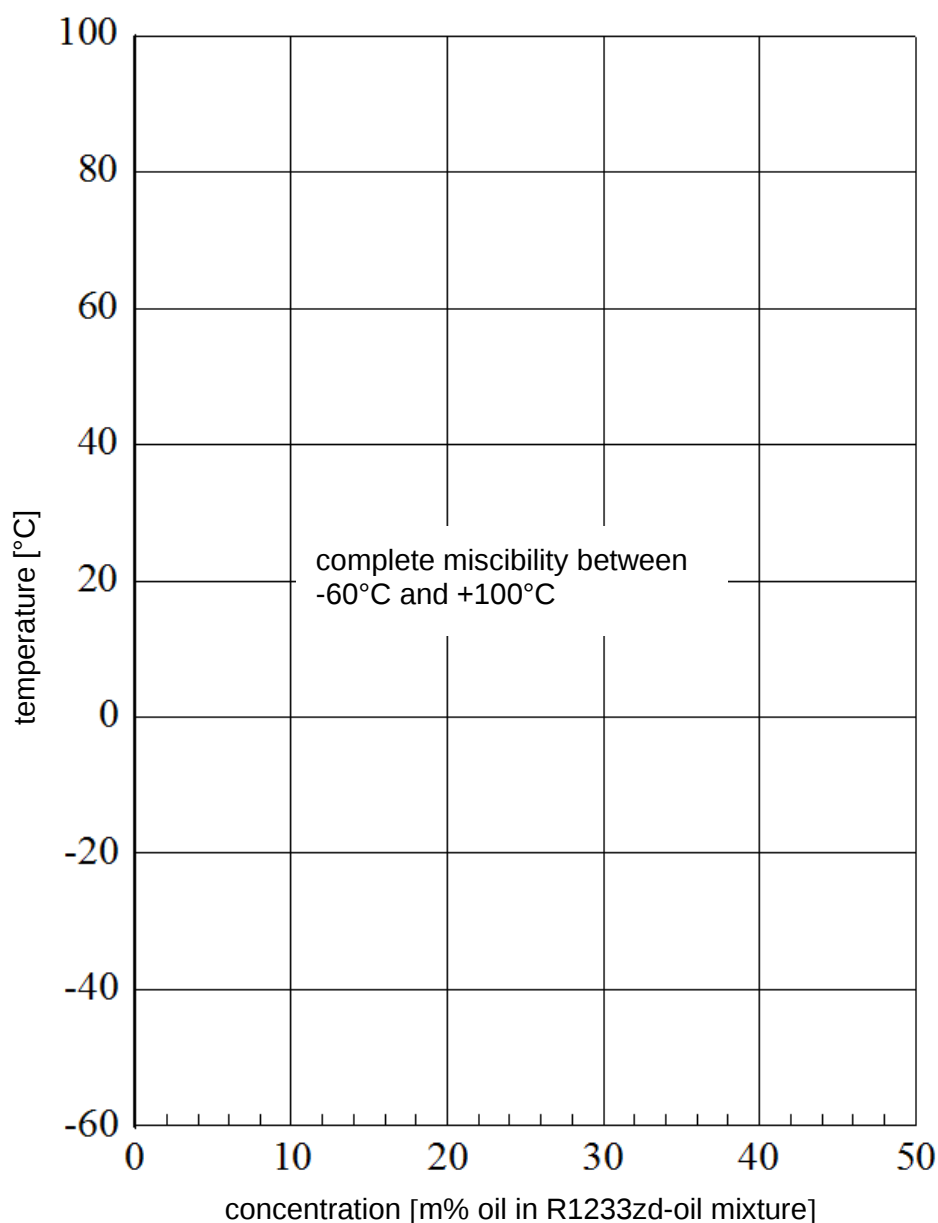
concentration [m% oil in R1224yd-oil-mixture]

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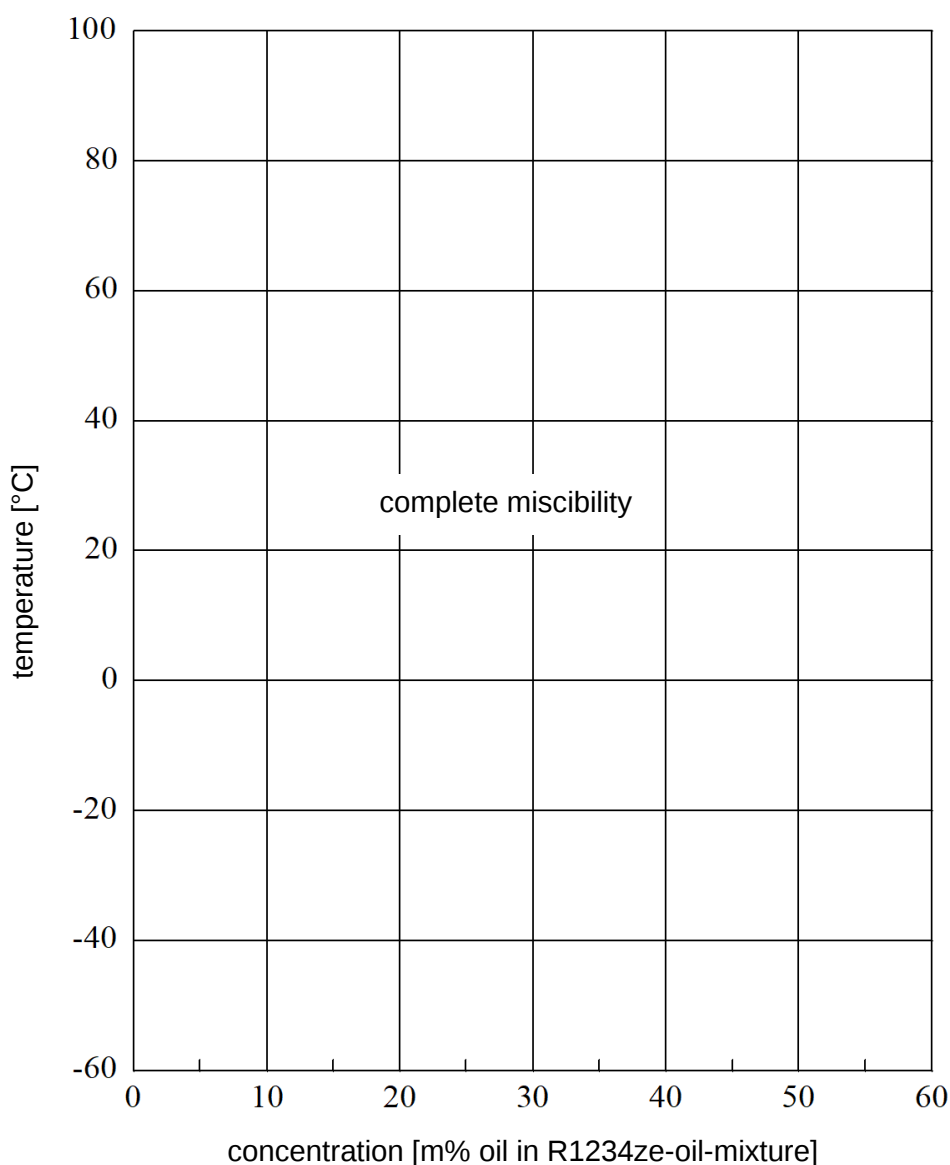
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1233zd



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Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

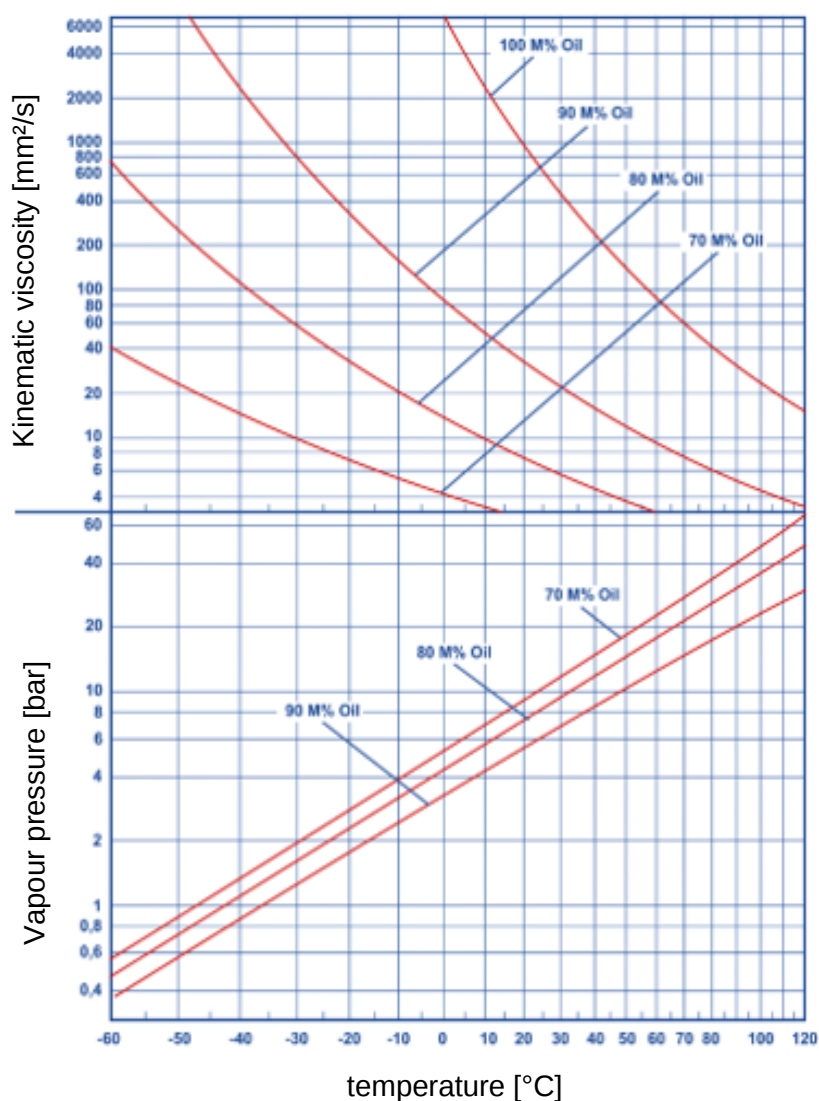
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1234ze



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Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Kinematic viscosity and vapour pressure: RENISO TRITON SE 220 and Propylene R1270

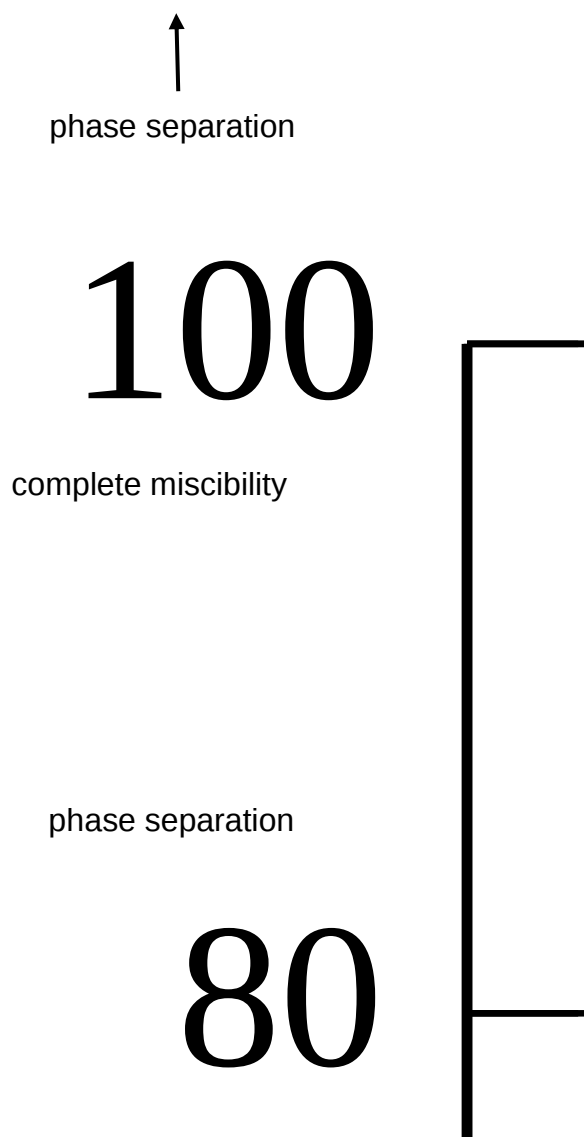


All % figures represent m% oil in the refrigerant-oil-mixture.

RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1336mzz-E

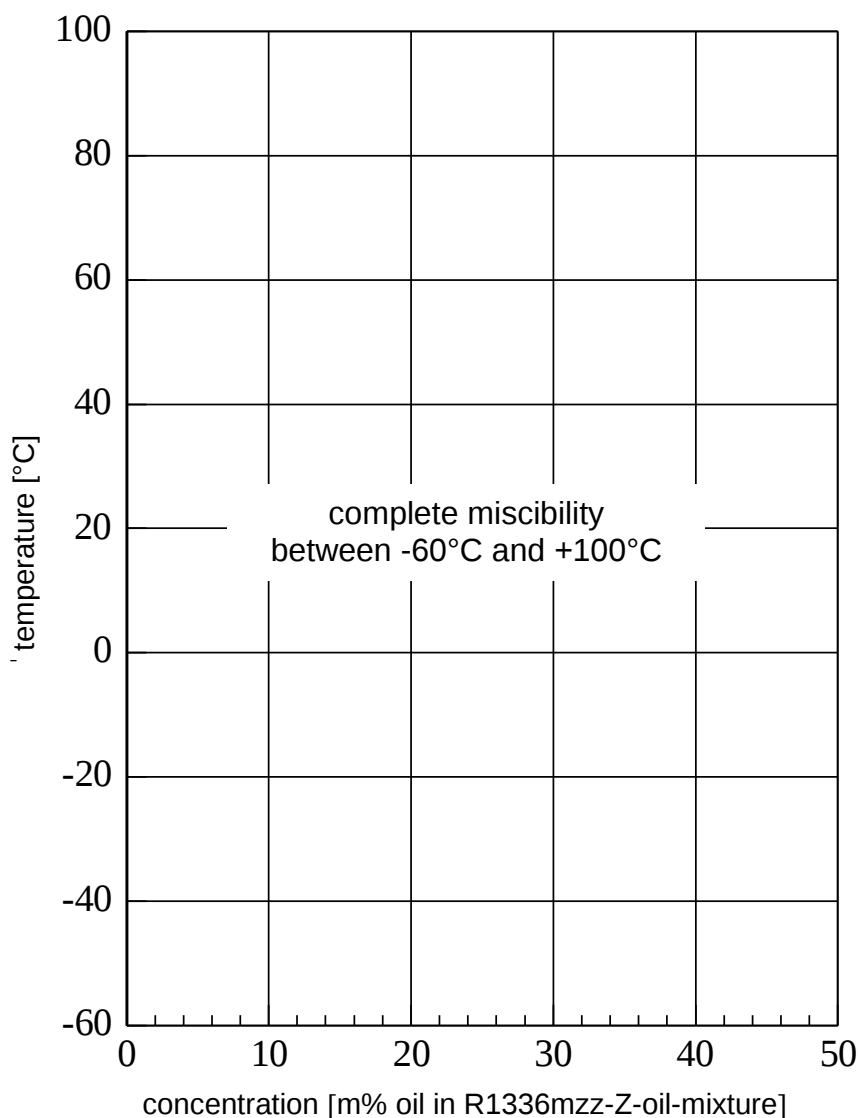


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RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

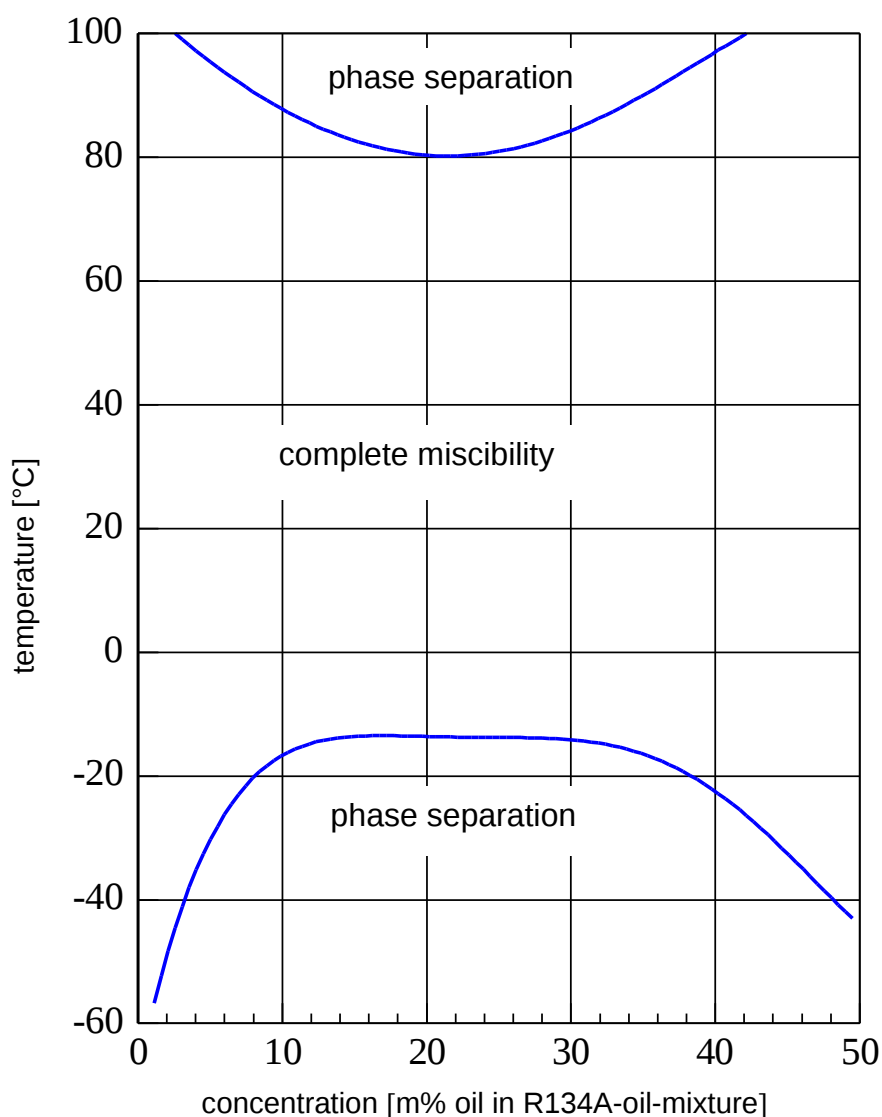
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1336mzz-Z



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Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

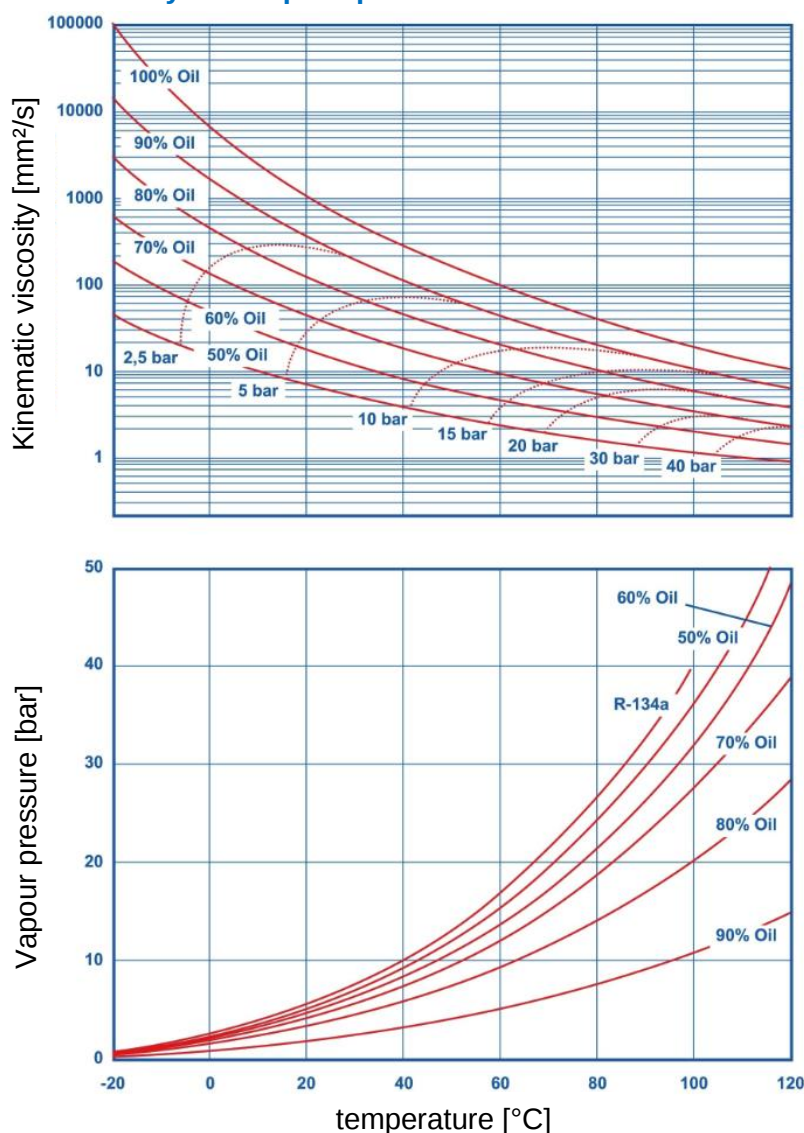
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R134A



RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Kinematic viscosity and vapour pressure: RENISO TRITON SE 220 and R134A

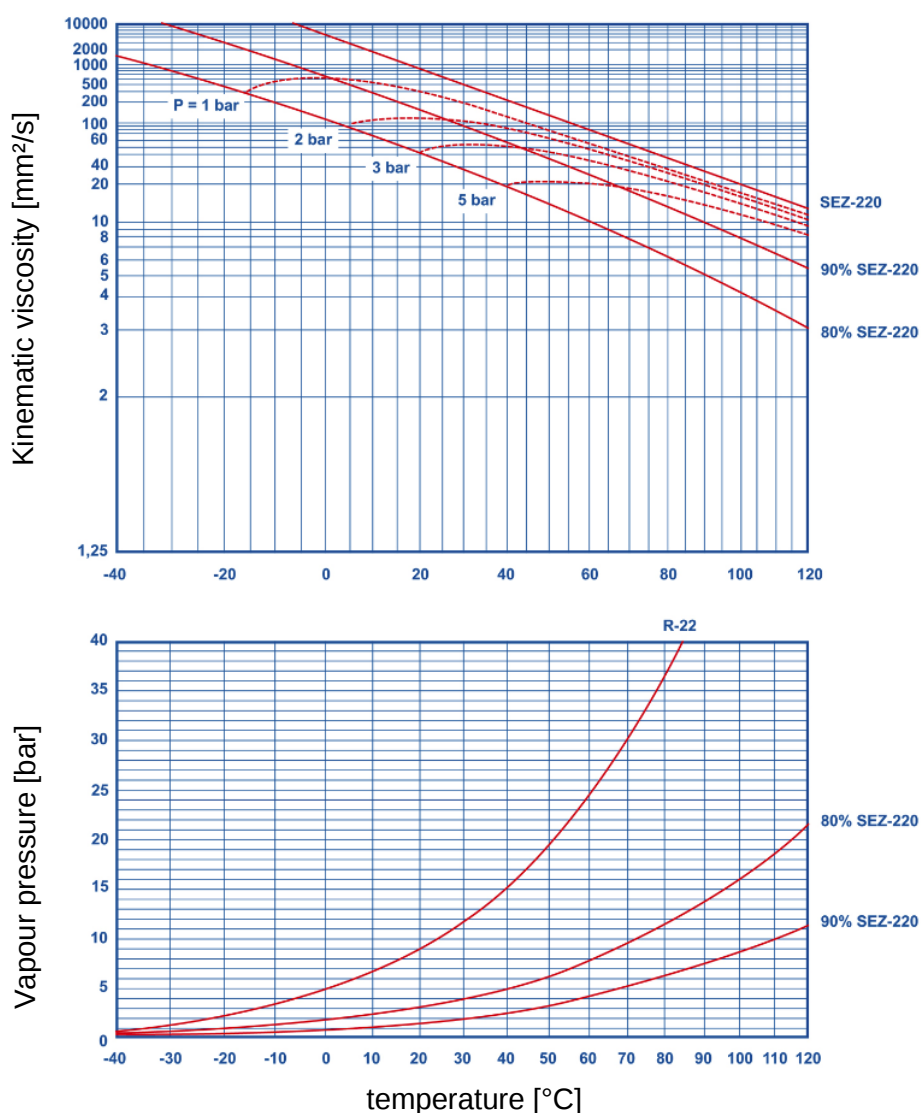


All % figures represent m% oil in the refrigerant-oil-mixture.

RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Kinematic viscosity and vapour pressure: RENISO TRITON SE 220 and R22

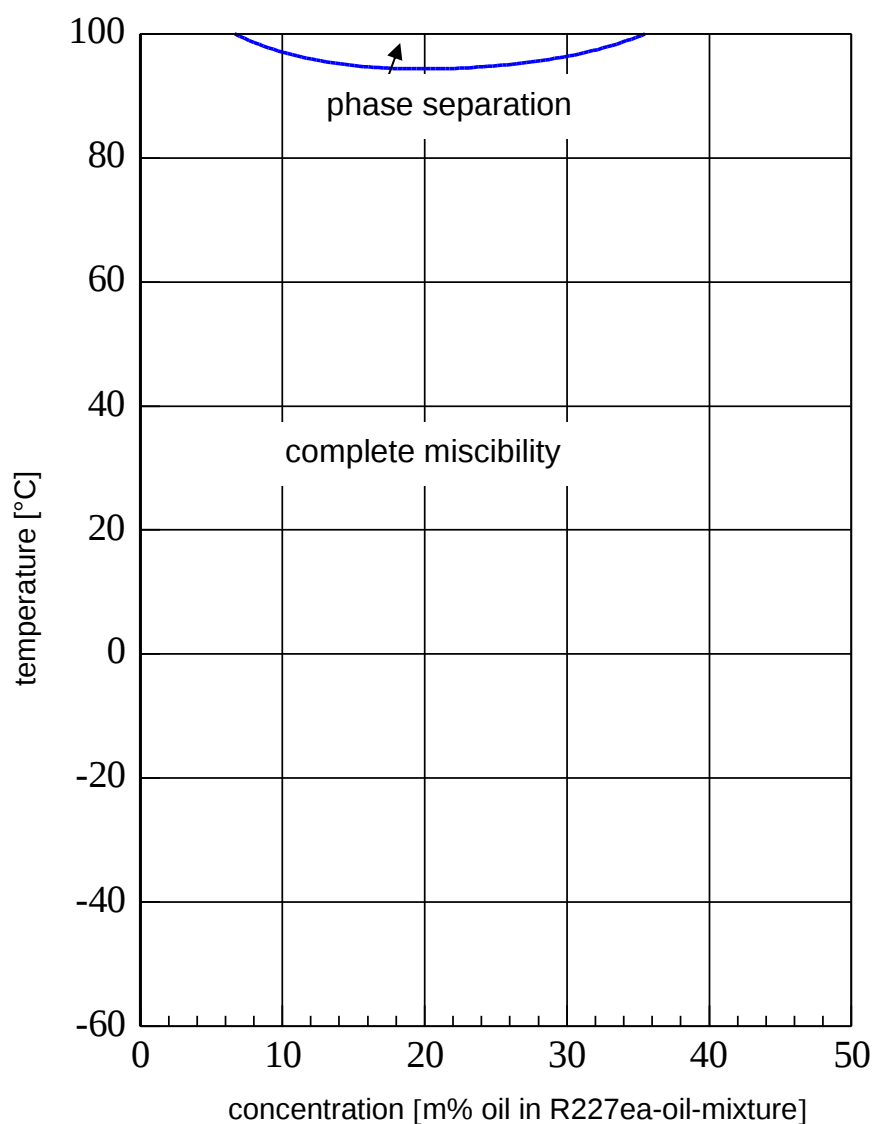


All % figures represent m% oil in the refrigerant-oil-mixture.

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Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

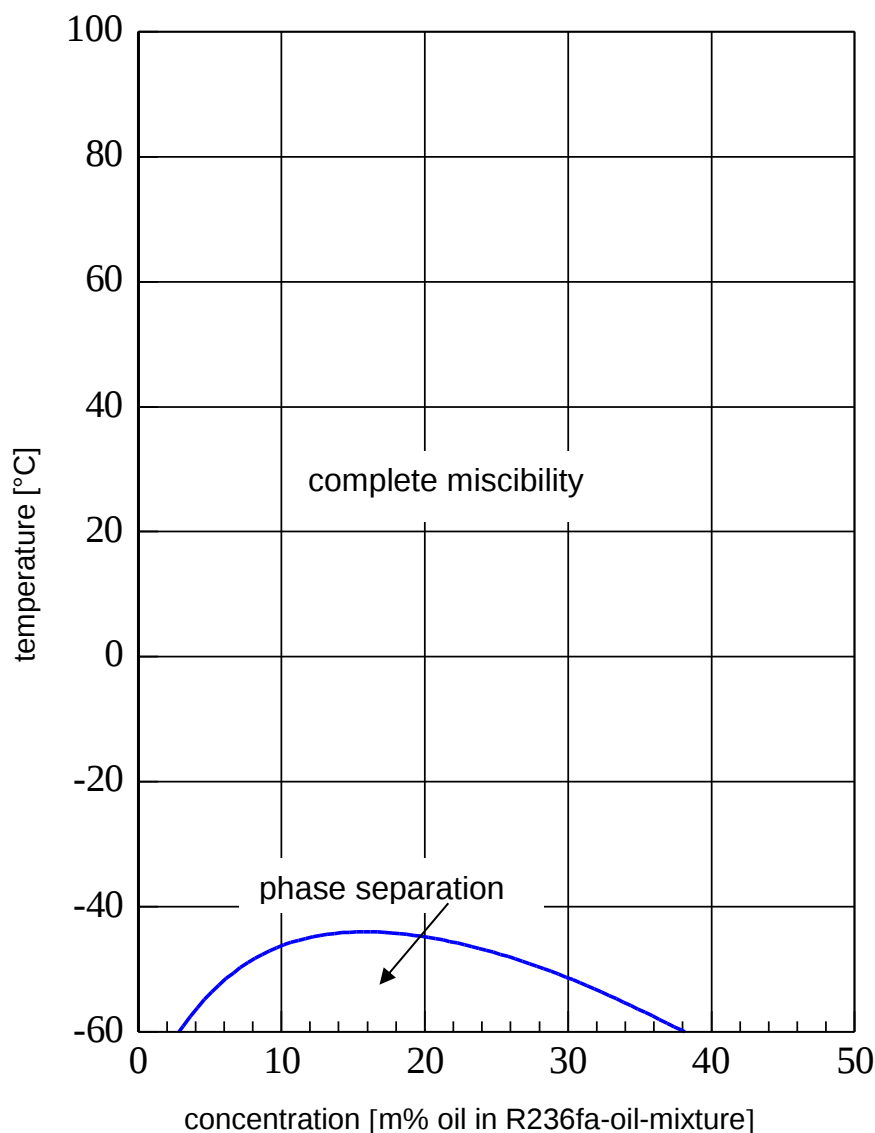
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R227ea



RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

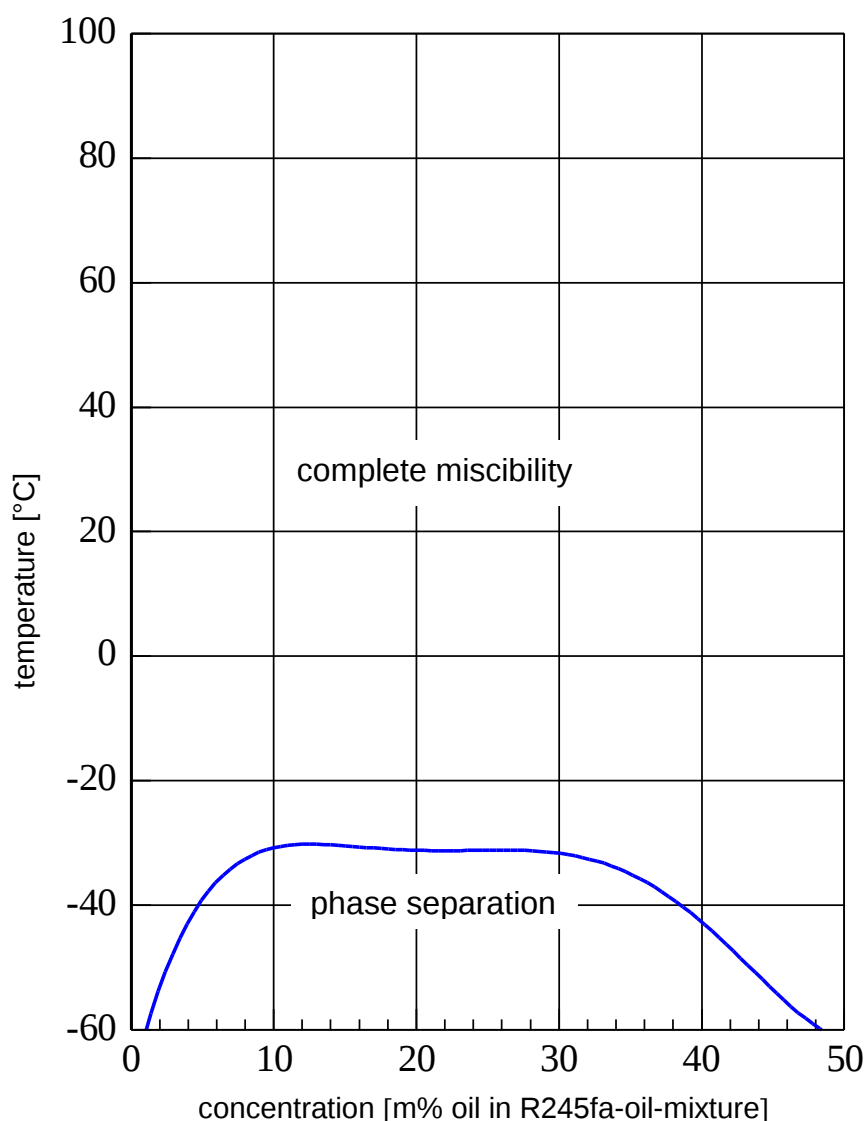
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R236fa



RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

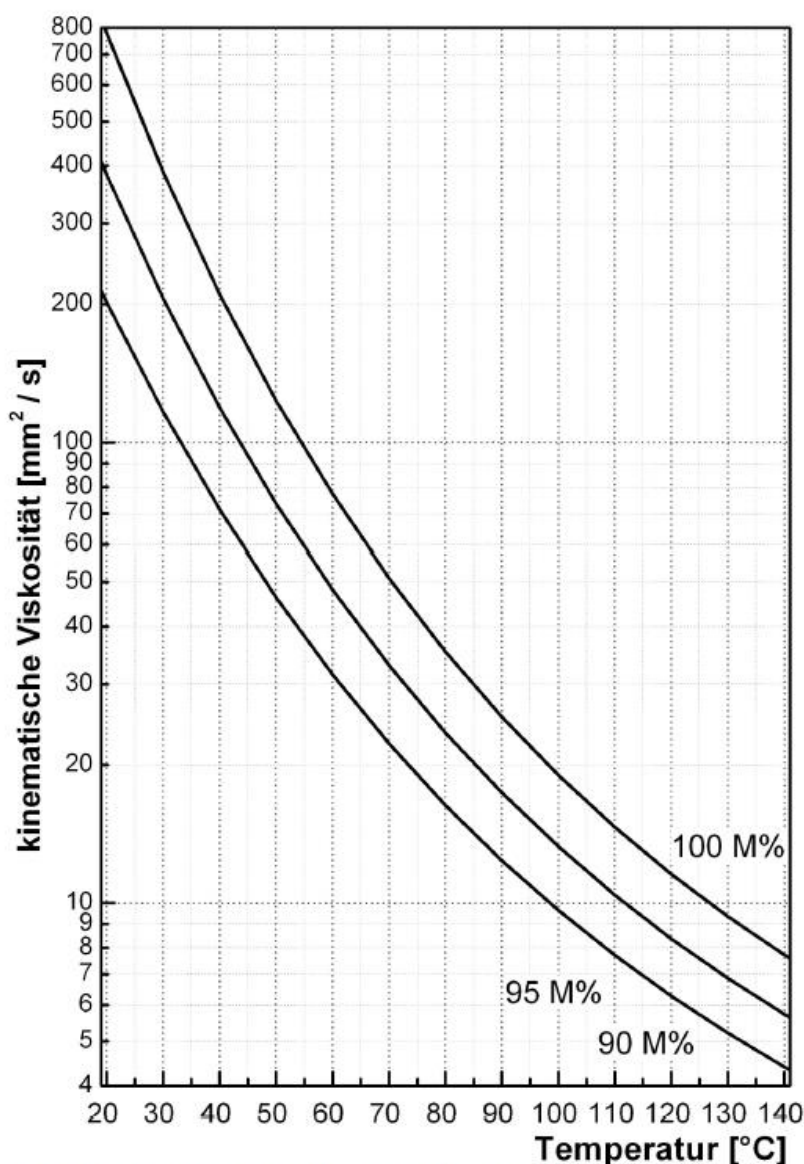
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R245fa



RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Kinematic viscosity and vapour pressure: RENISO TRITON SE 220 and R245fa



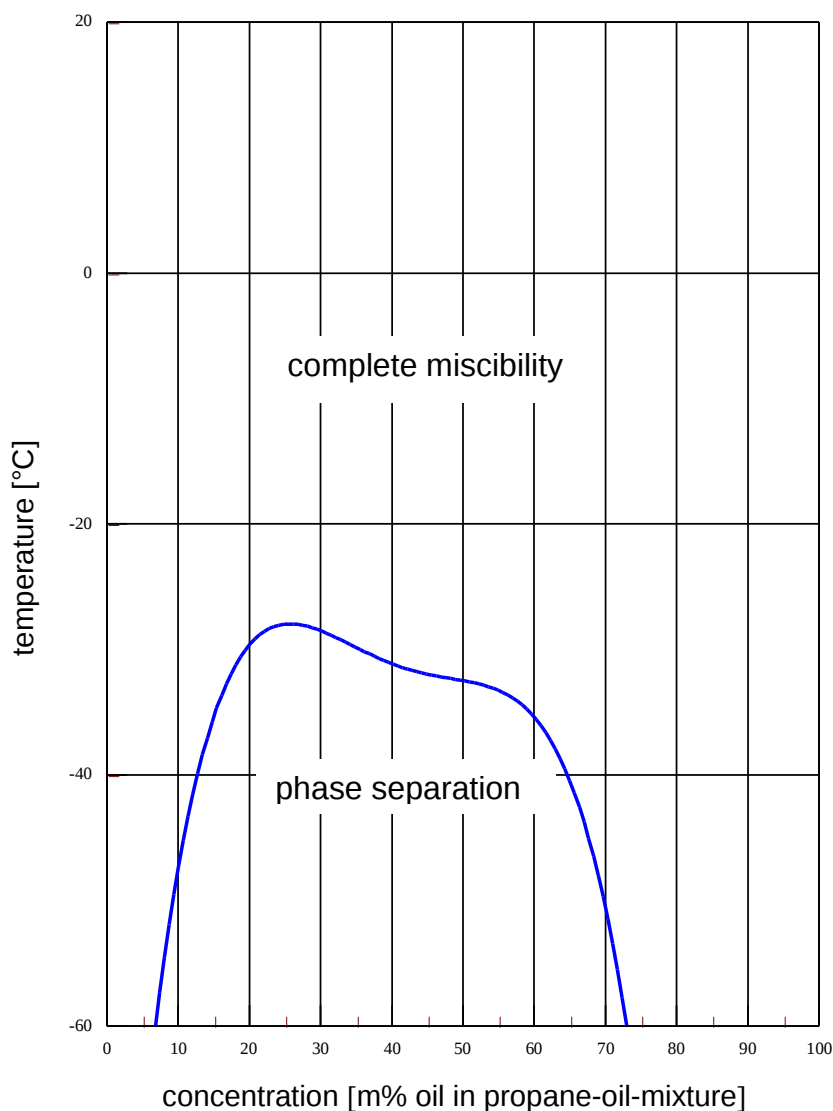
All % figures represent m% oil in the refrigerant-oil-mixture.

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RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and propane R290

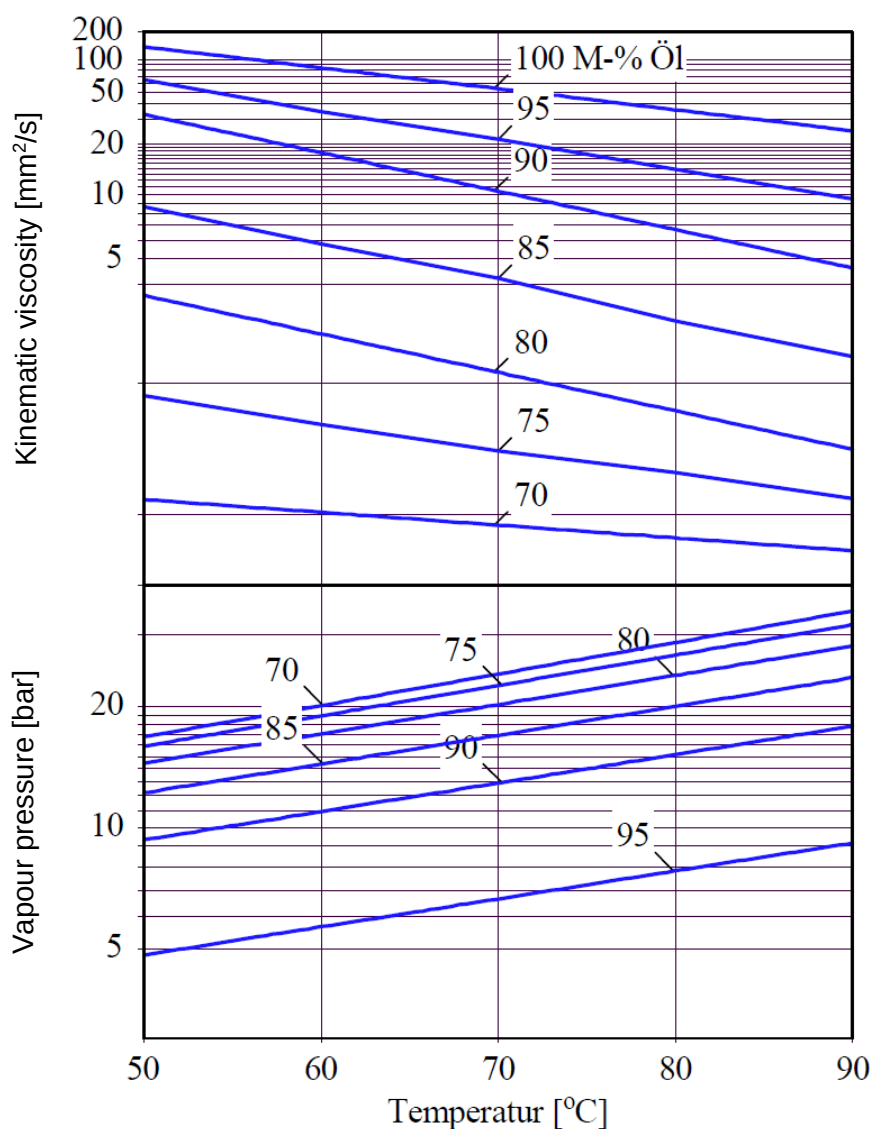


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RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Kinematic viscosity and vapour pressure: RENISO TRITON SE 220 and propane R290



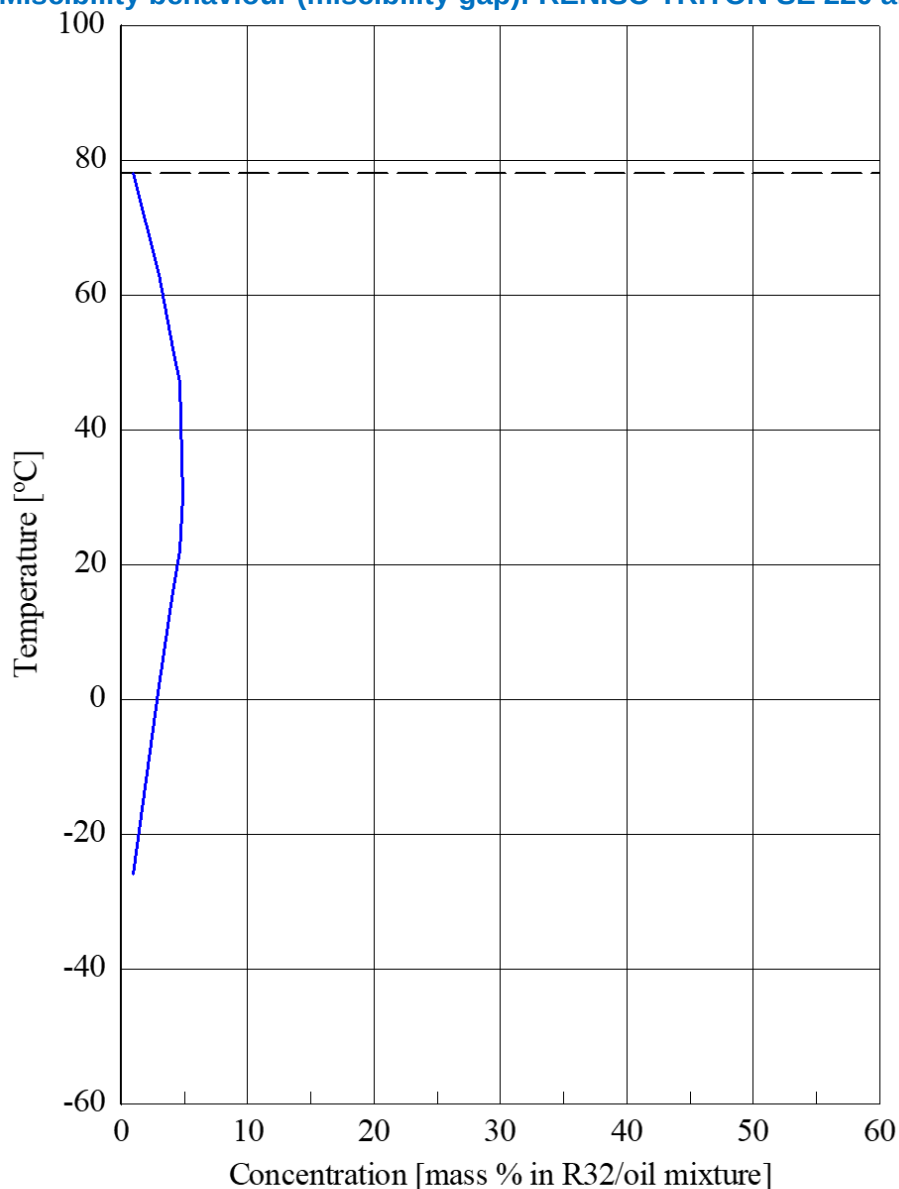
All % figures represent m% oil in the refrigerant-oil-mixture.

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RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R32

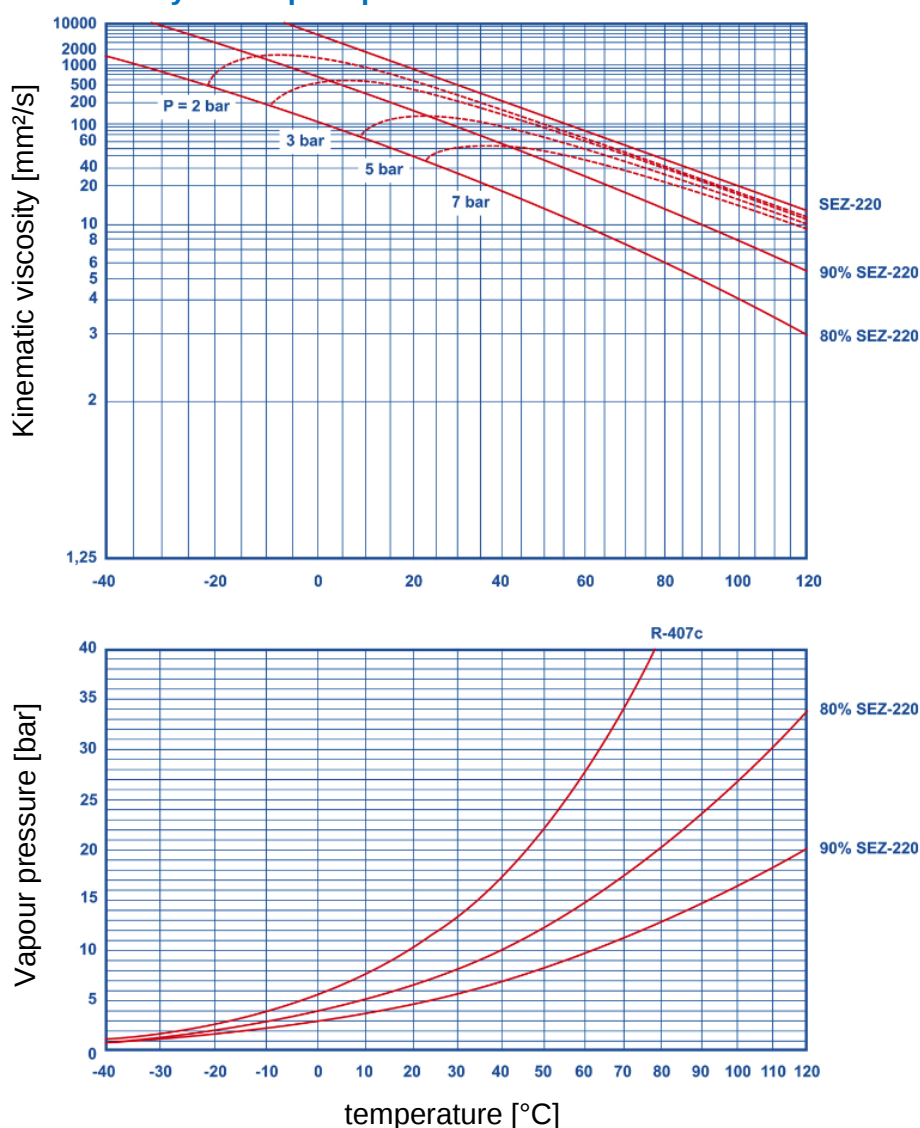


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RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Kinematic viscosity and vapour pressure: RENISO TRITON SE 220 and R407C



All % figures represent m% oil in the refrigerant-oil-mixture.

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RENISO TRITON SE 220

Synthetic refrigeration oil based on polyol esters (POE) for HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R744

