

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, polypropylene, 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.

RENISO TRITON SE 220

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

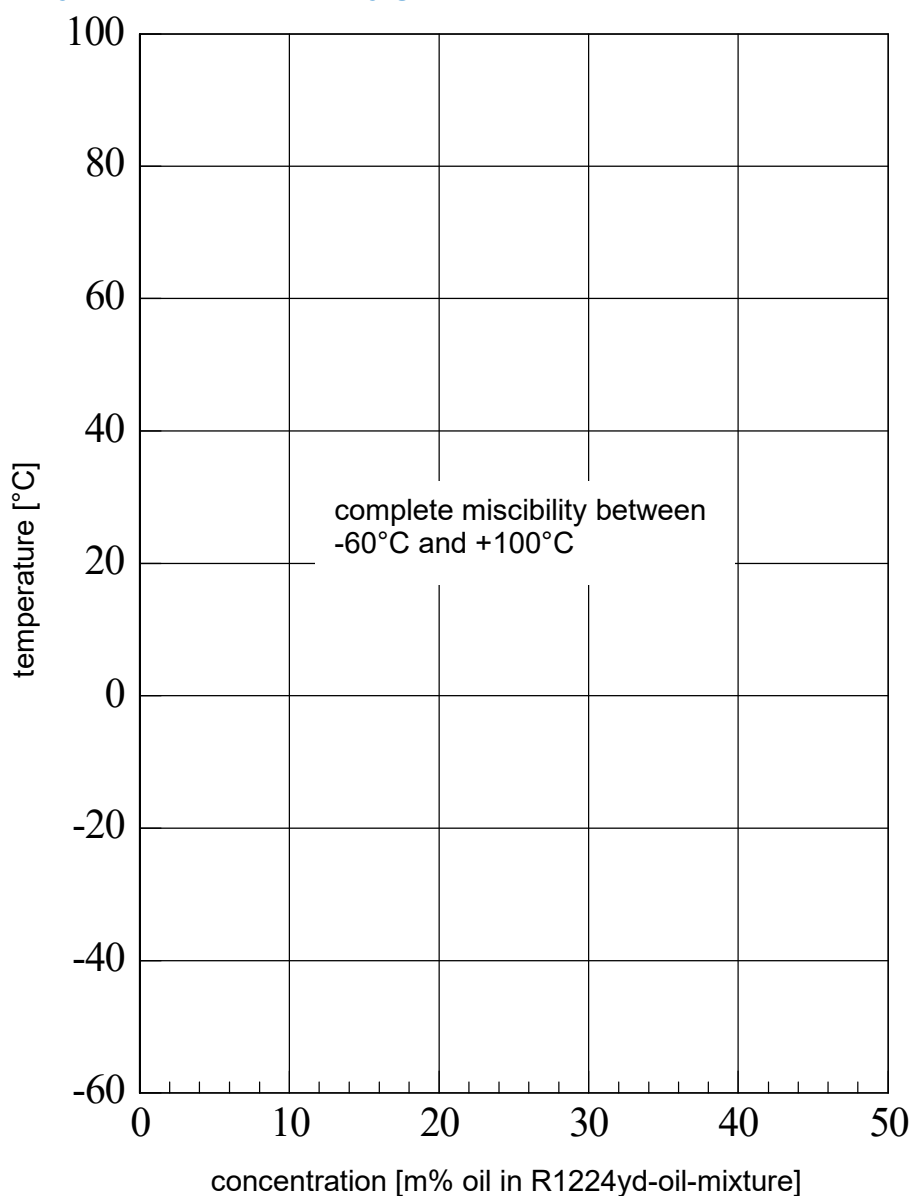
Typical technical data:

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

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 R1224yd

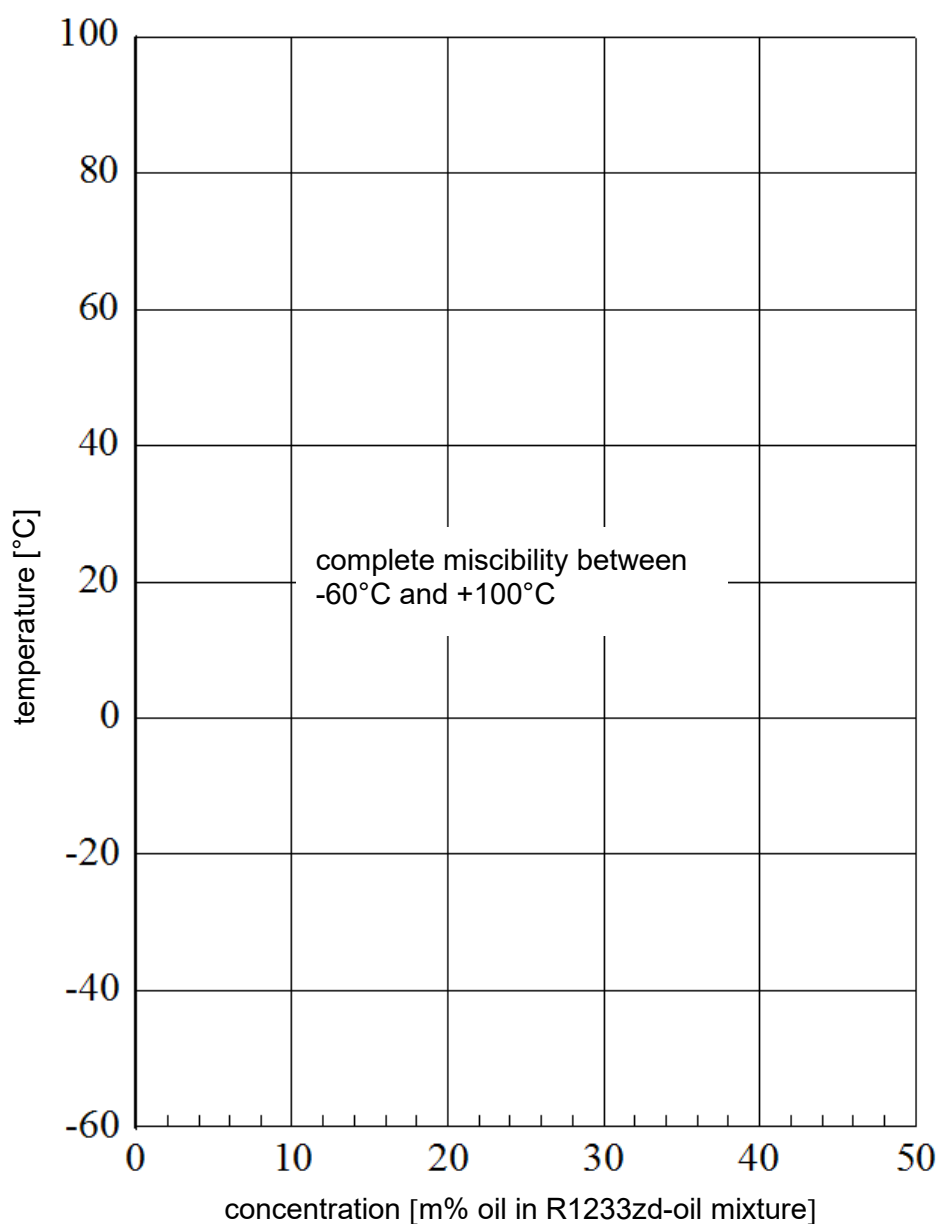


PI 4-1336, Page 3; PM 4 / 09.21

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 R1233zd

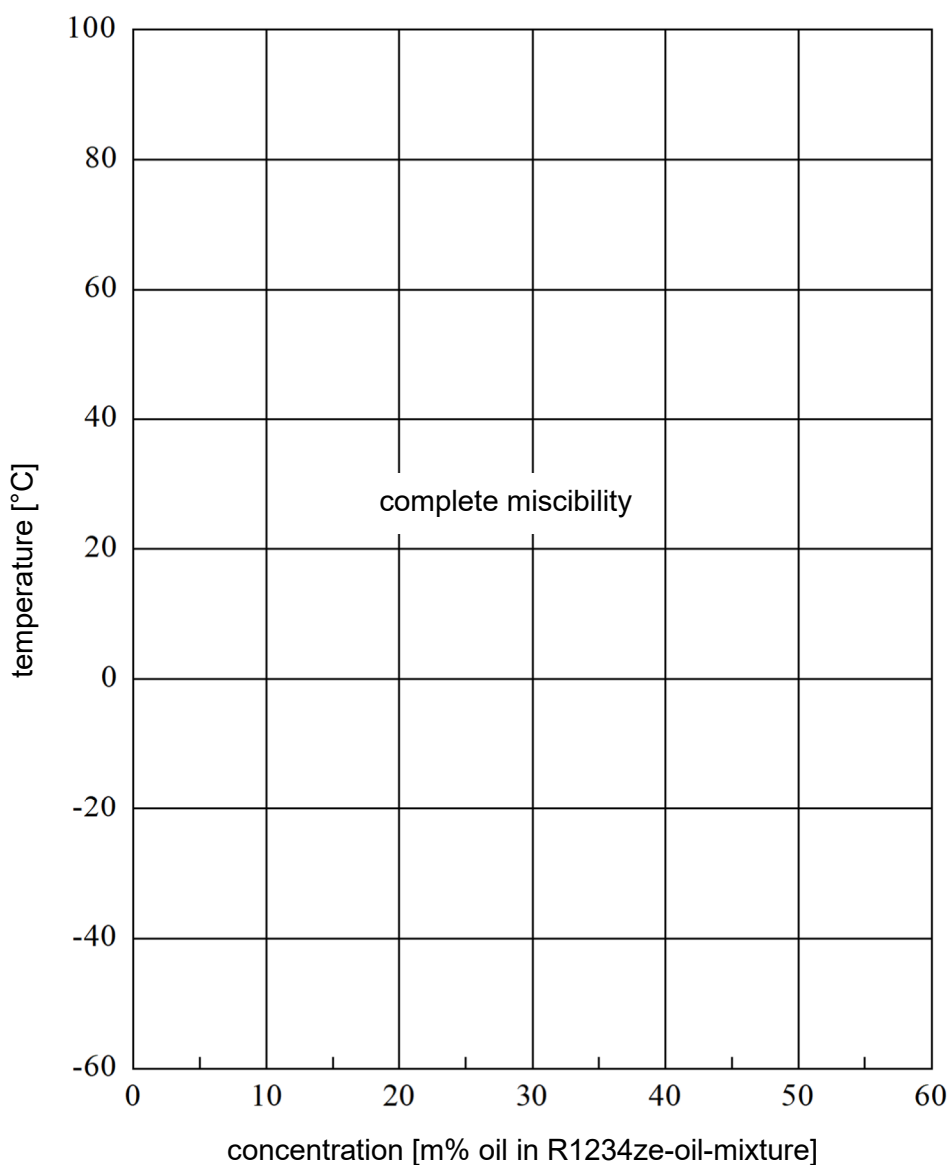


PI 4-1336, Page 4; PM 4 / 09.21

RENISO TRITON SE 220

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

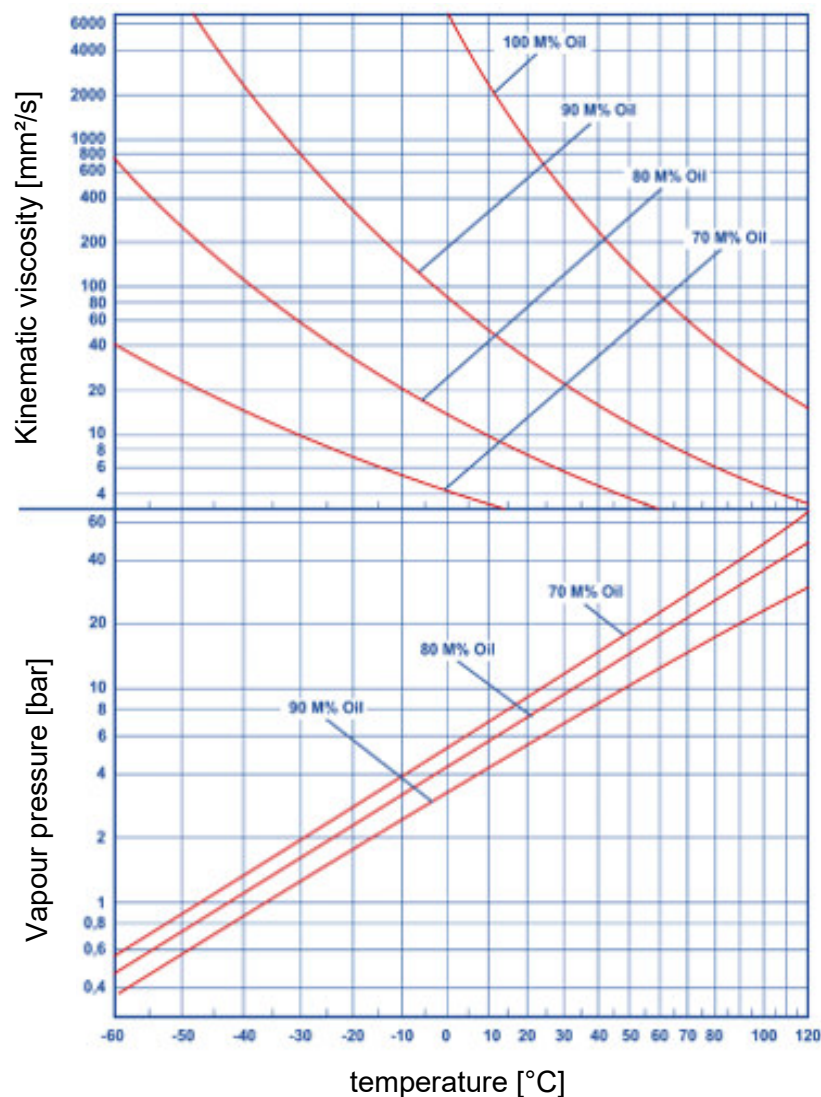
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1234ze



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 Propylene R1270



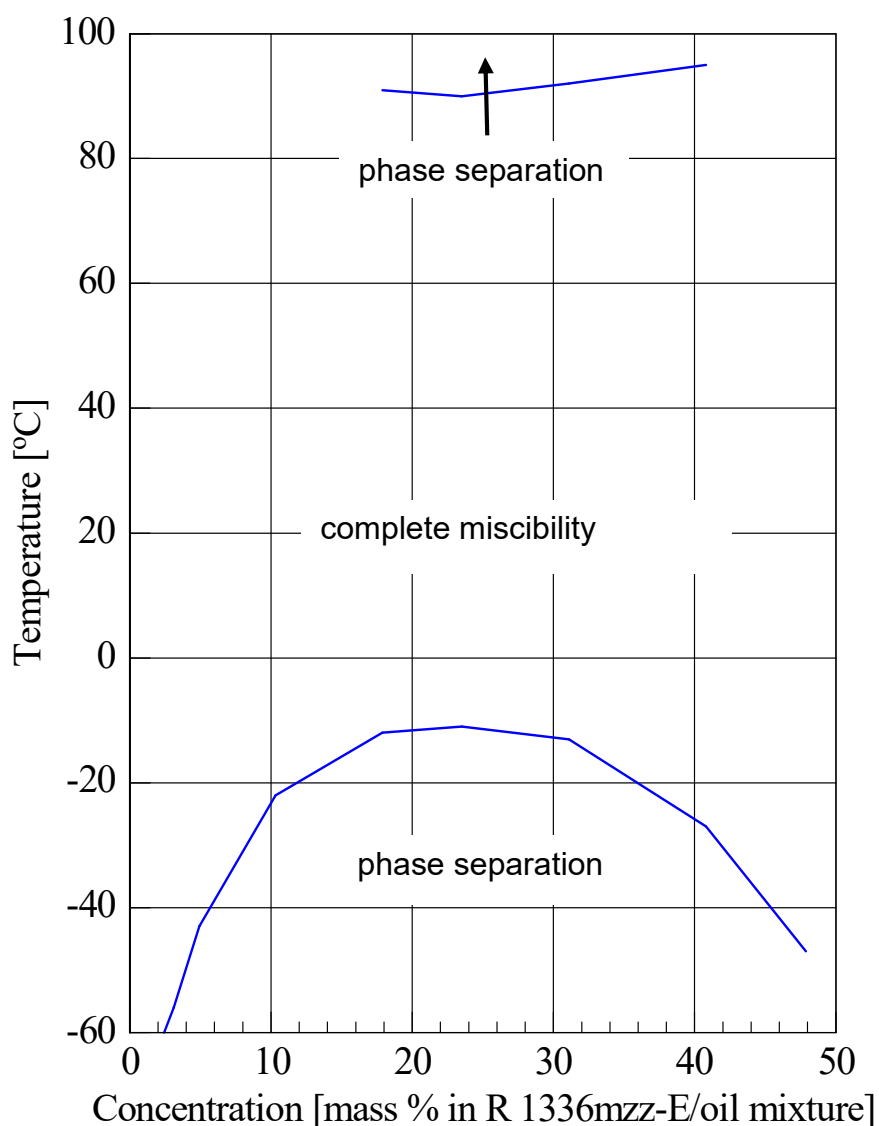
All % figures represent m% oil in the refrigerant-oil-mixture.

PI 4-1336, Page 6; PM 4 / 09.21

RENISO TRITON SE 220

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

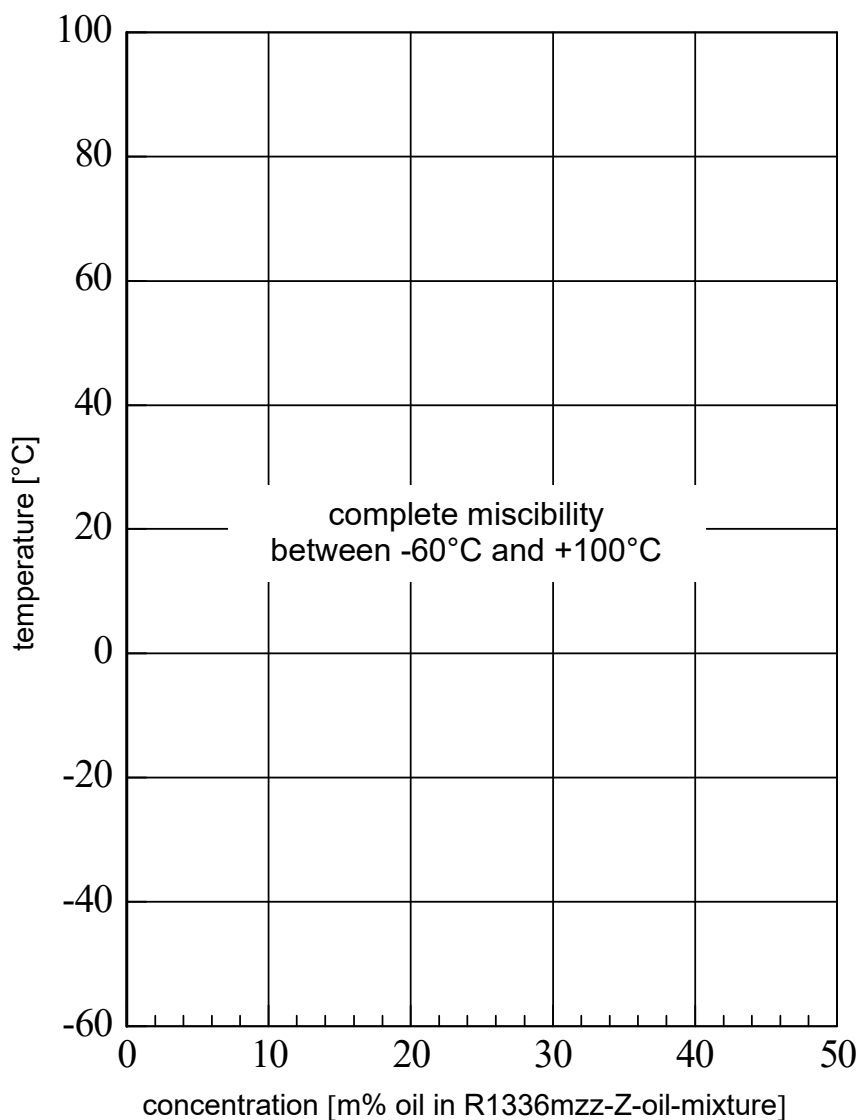
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R1336mzz-E



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

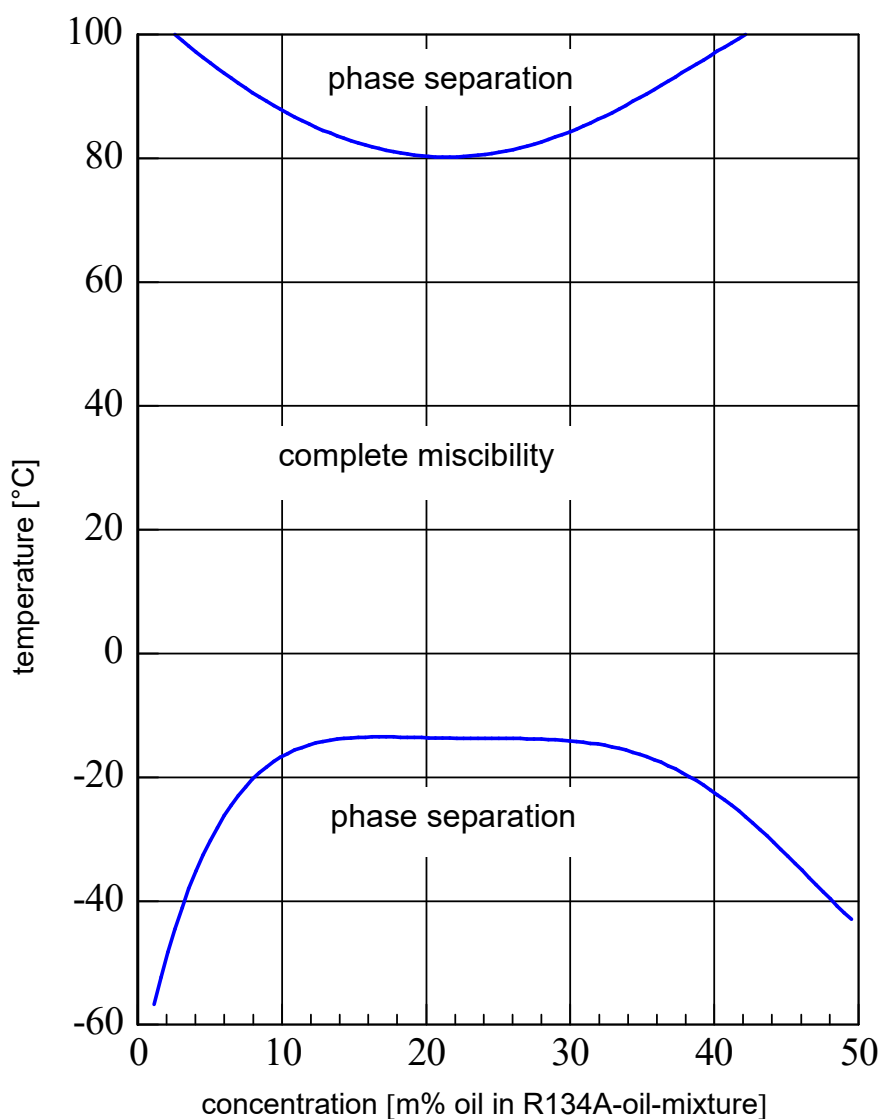


PI 4-1336, Page 8; PM 4 / 09.21

RENISO TRITON SE 220

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

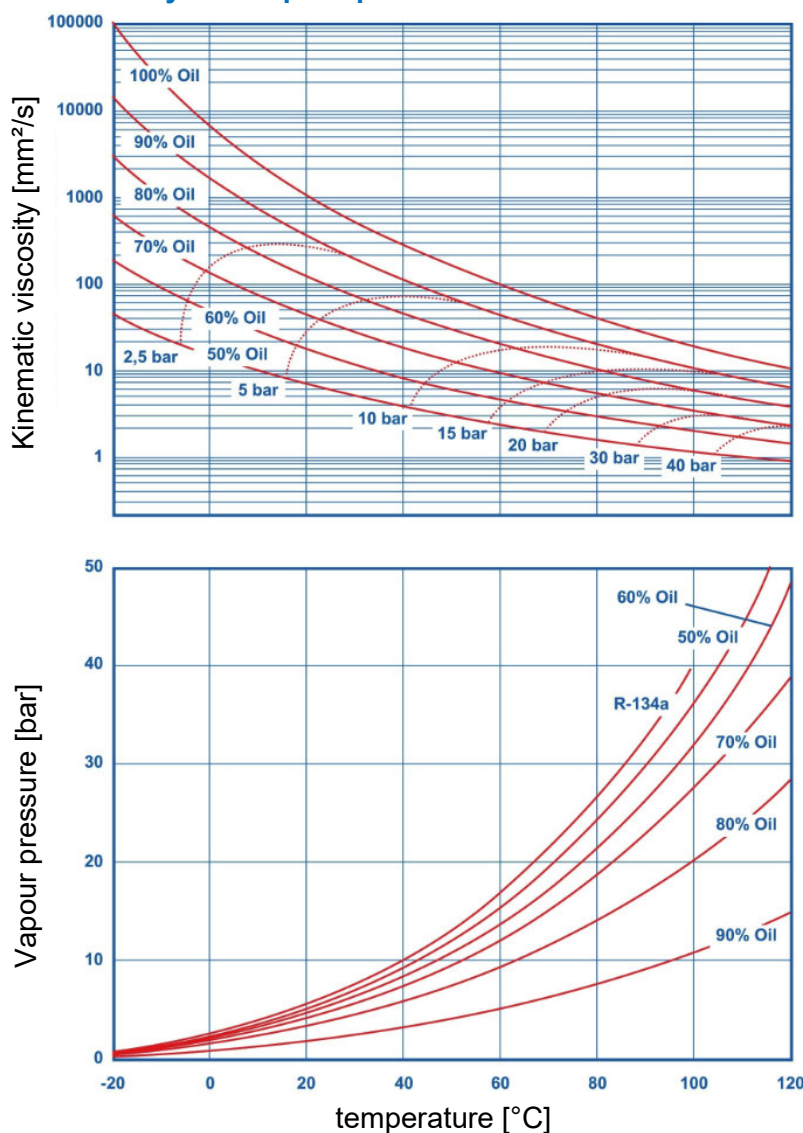
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R134A



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

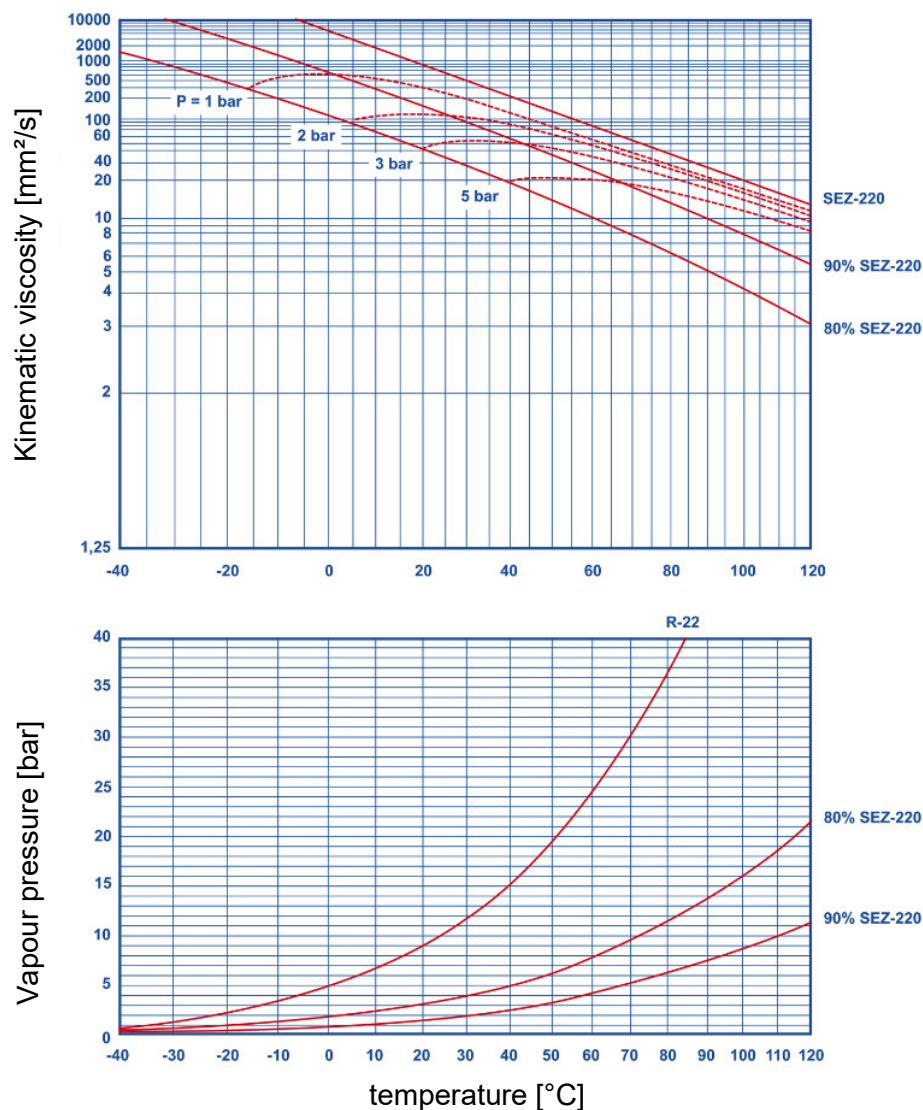


All % figures represent m% oil in the refrigerant-oil-mixture.

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

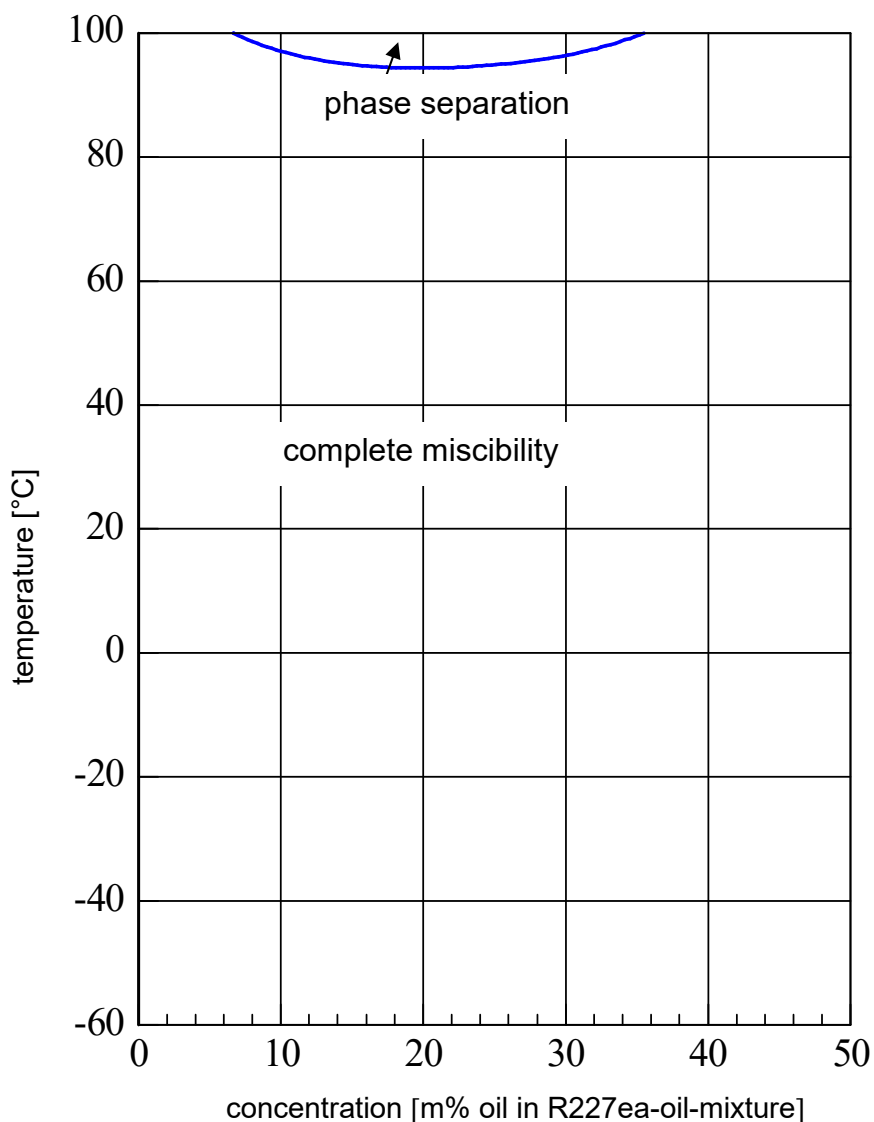


All % figures represent m% oil in the refrigerant-oil-mixture.

RENISO TRITON SE 220

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

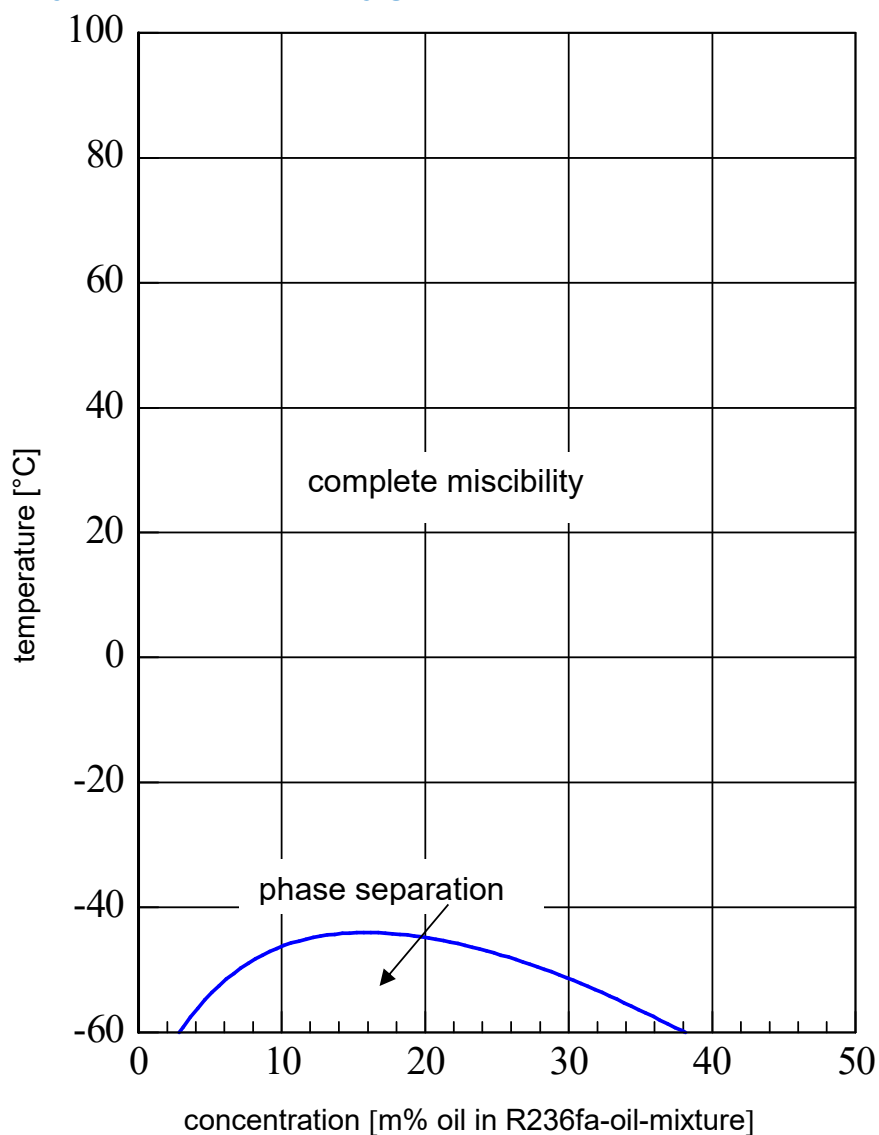
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R227ea



RENISO TRITON SE 220

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

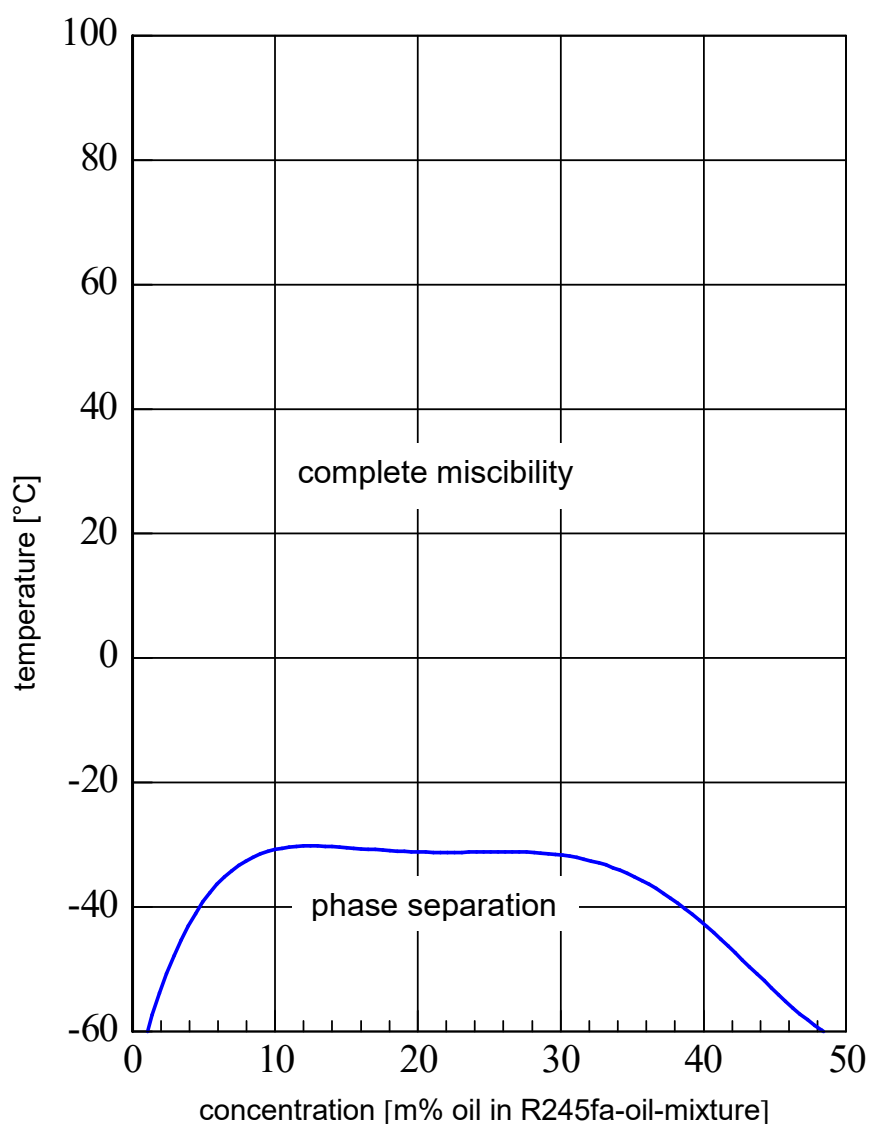
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R236fa



RENISO TRITON SE 220

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

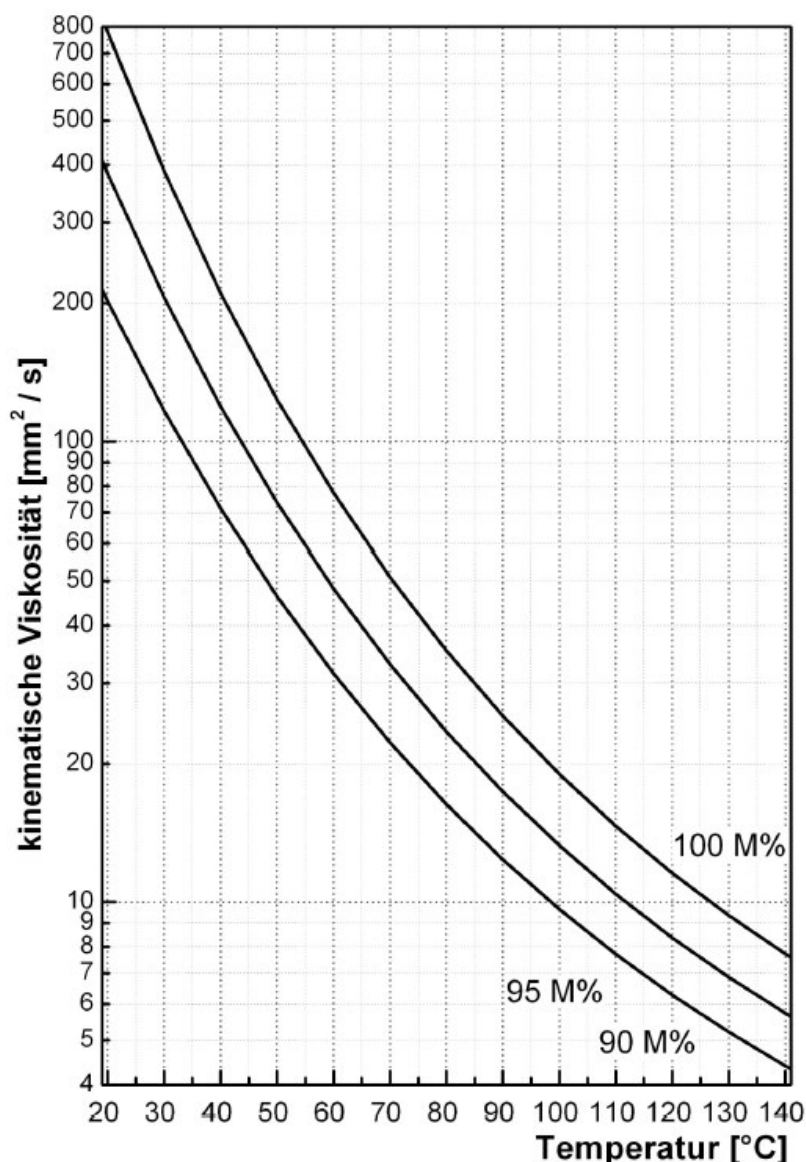
Miscibility behaviour (miscibility gap): RENISO TRITON SE 220 and R245fa



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



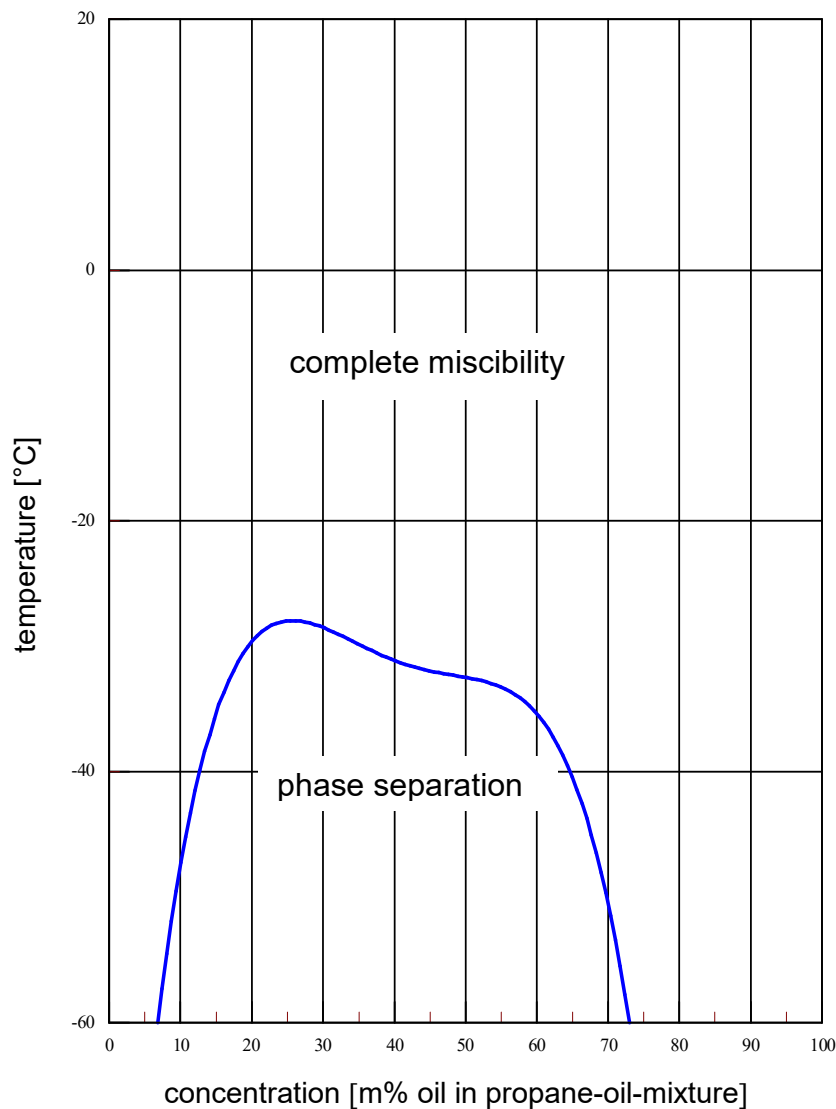
All % figures represent m% oil in the refrigerant-oil-mixture.

PI 4-1336, Page 15; PM 4 / 09.21

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

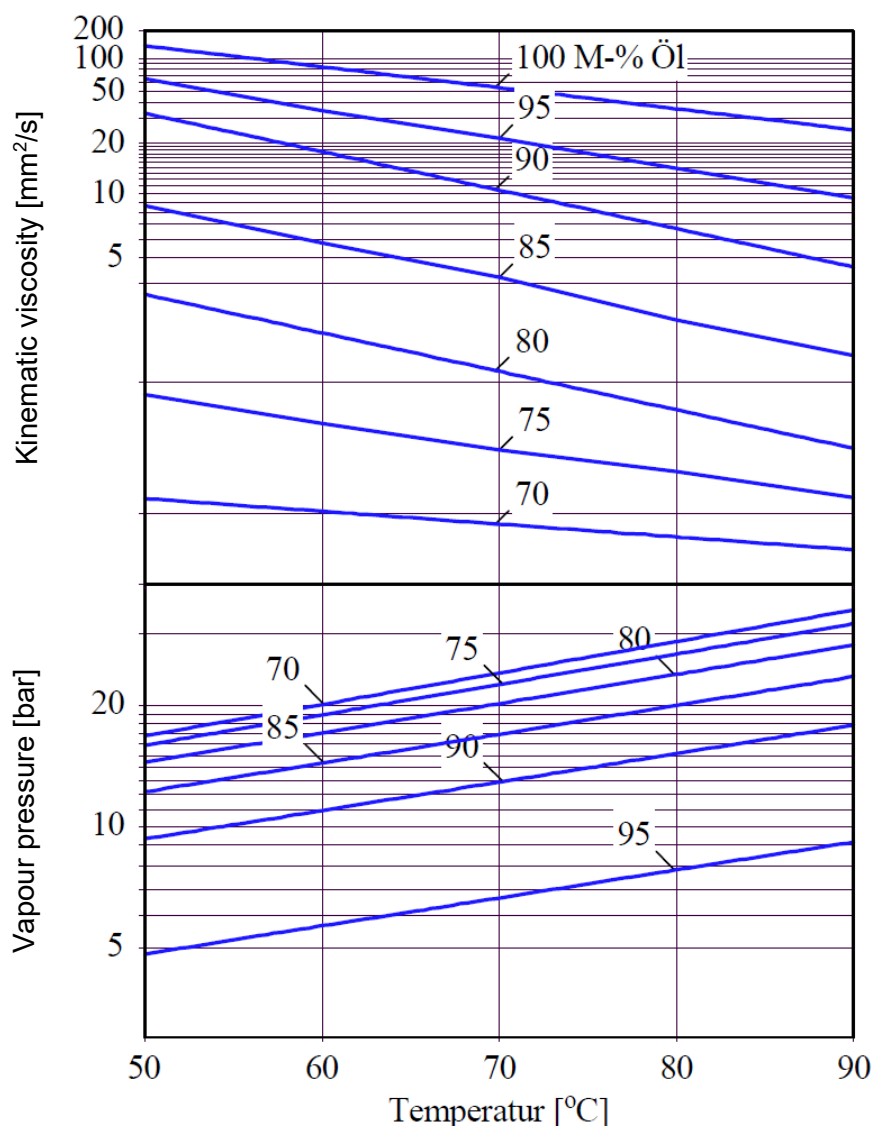


PI 4-1336, Page 16; PM 4 / 09.21

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



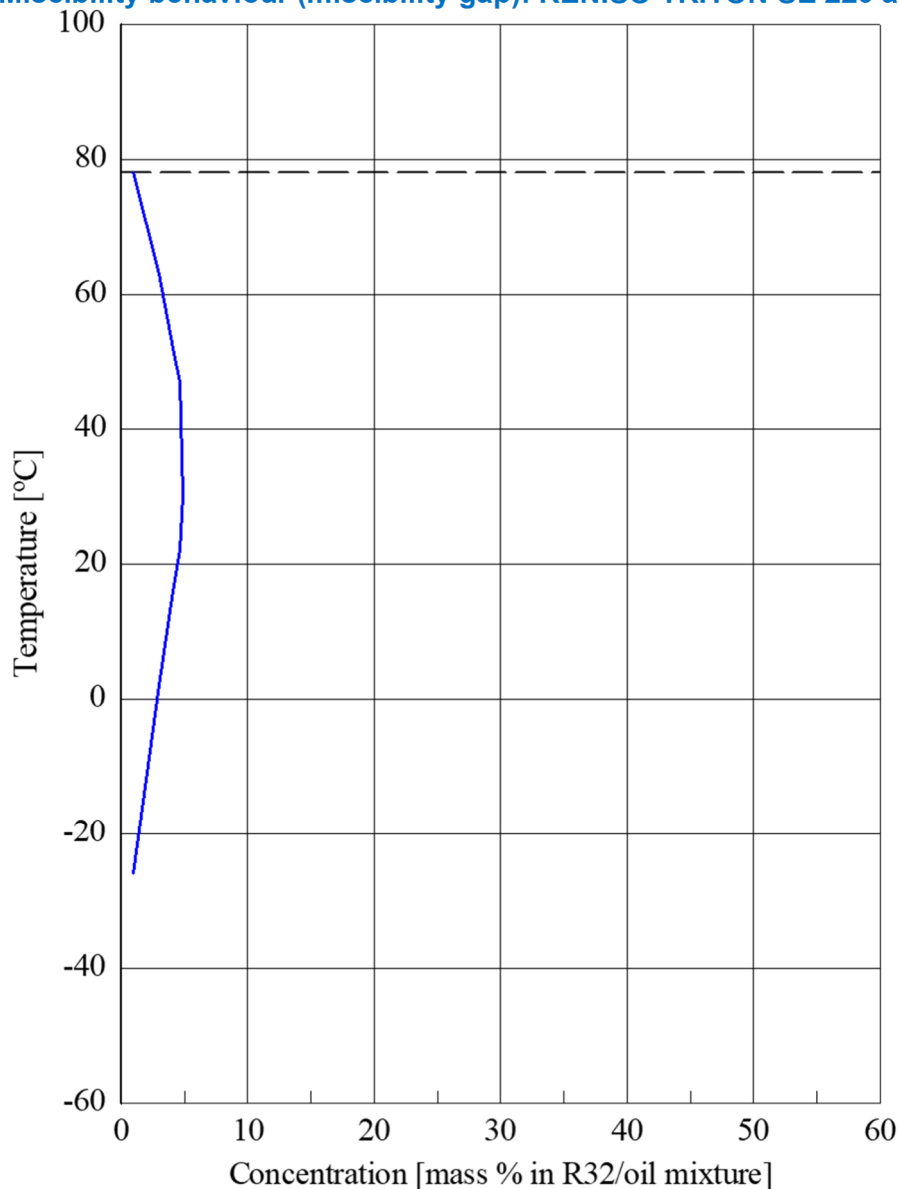
All % figures represent m% oil in the refrigerant-oil-mixture.

PI 4-1336, Page 17; PM 4 / 09.21

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

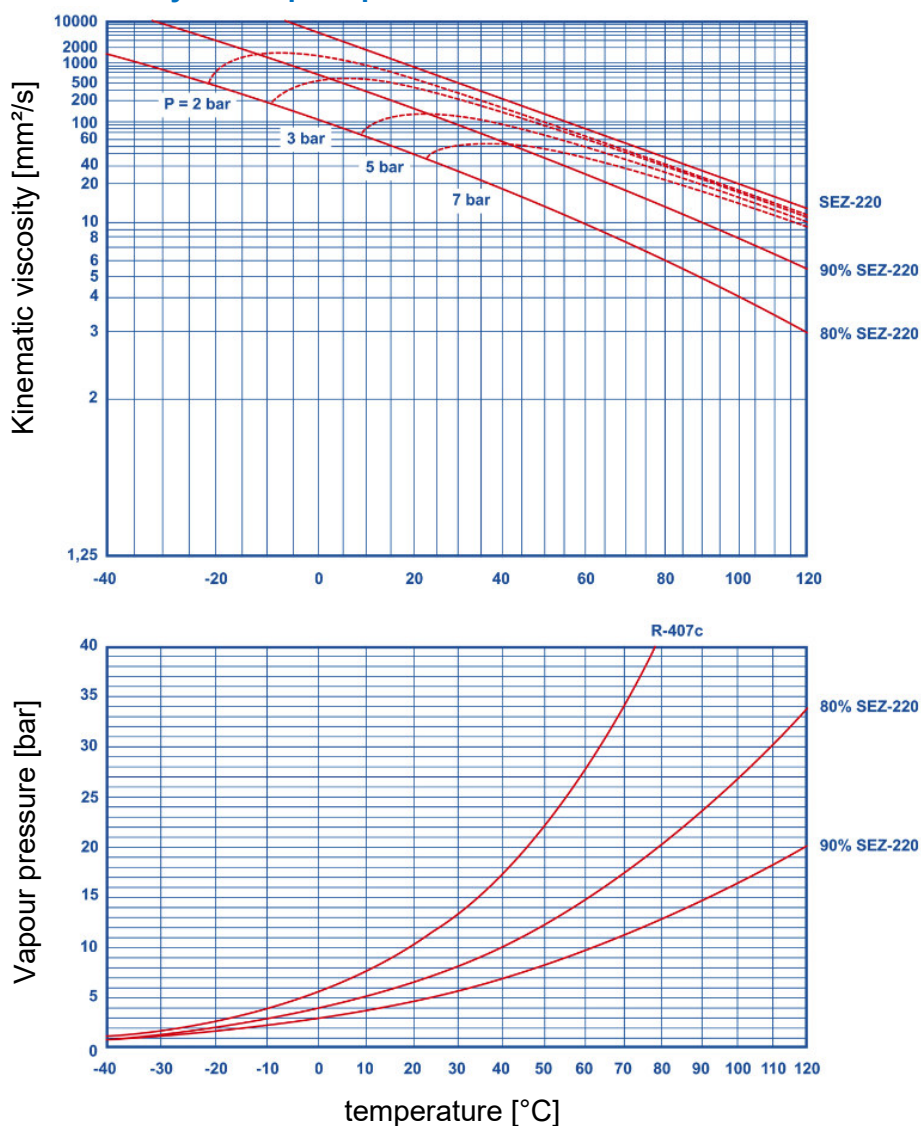


PI 4-1336, Page 18; PM 4 / 09.21

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



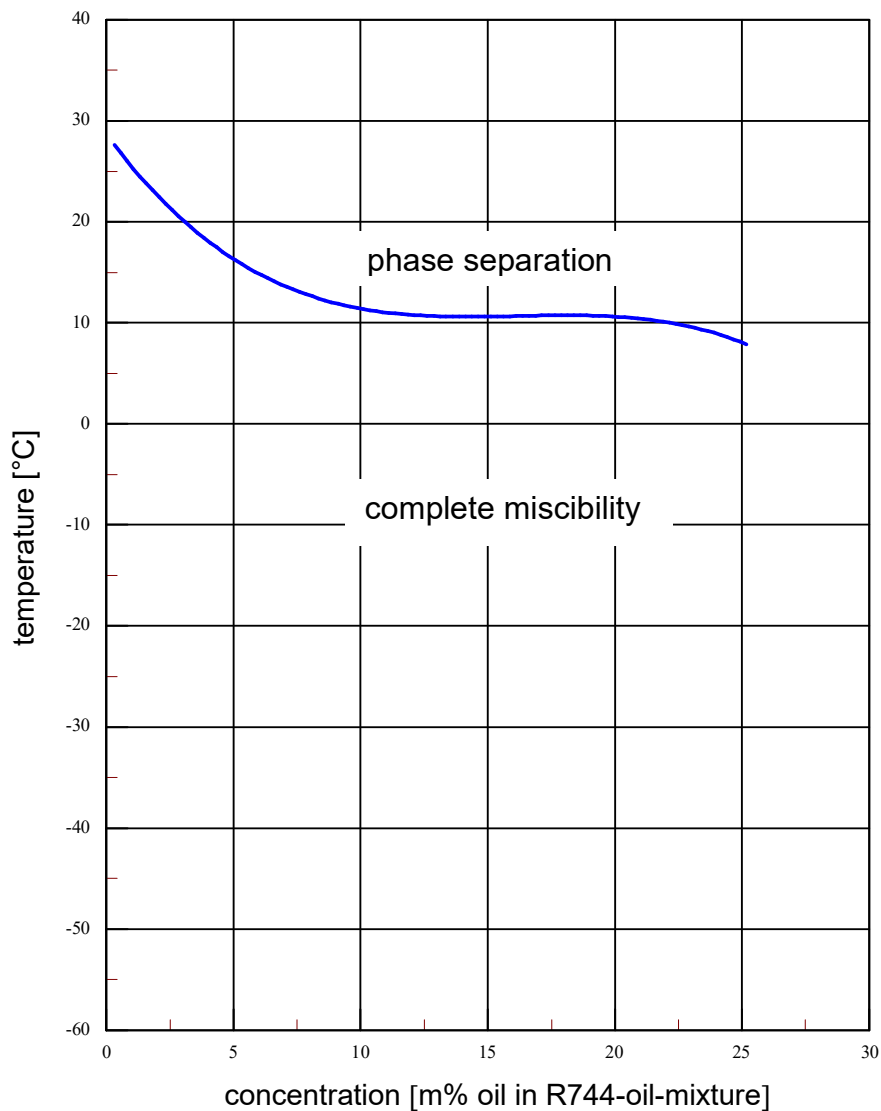
All % figures represent m% oil in the refrigerant-oil-mixture.

PI 4-1336, Page 19; PM 4 / 09.21

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



Product Information

MOVING YOUR WORLD



Note

The information contained in this product information is based on the experience and know-how of FUCHS LUBRICANTS GERMANY GmbH in the development and manufacturing of lubricants and represents the current state-of-the-art. The performance of our products can be influenced by a series of factors, especially the specific use, the method of application, the operational environment, component pre-treatment, possible external contamination, etc. For this reason, universally-valid statements about the function of our products are not possible.

Our products must not be used in aircraft or spacecraft. Our products may be used in the manufacture of components for aircraft or spacecraft if they are removed without residue from the components prior to assembly into the aircraft or spacecraft.

The information given in this product information represents general, non-binding guidelines. No warranty expressed or implied is given concerning the properties of the product or its suitability for any given application. We therefore recommend that you consult a FUCHS LUBRICANTS GERMANY GmbH application engineer to discuss application conditions and the performance criteria of the products before the product is used. It is the responsibility of the user to test the functional suitability of the product and to use it with the corresponding care.

Our products undergo continuous improvement. We therefore retain the right to change our product program, the products, and their manufacturing processes as well as all details of our product information sheets at any time and without warning, unless otherwise provided in customer-specific agreements. With the publication of this product information, all previous editions cease to be valid. Any form of reproduction requires express prior written permission from FUCHS LUBRICANTS GERMANY GmbH.

© FUCHS LUBRICANTS GERMANY GmbH. All Rights reserved.