

## RENISO TRITON SE 55

### 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 55 is based on synthetic polyol ester that were especially developed for use with chlorine-free, fluorinated hydrocarbons. RENISO TRITON SE 55 refrigeration oil is miscible and compatible with HFC/FC and HFO refrigerants – including HFO/HFC refrigerant blends.

#### Application

The RENISO TRITON SE 55 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 55 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 55 is especially suitable for deep-freeze systems operating with R23.

RENISO TRITON SE 55 product is also suitable for hydrocarbon refrigerants (e.g. propane, polypropylene, isobutane) and R22. If RENISO TRITON SE 55 is used with the above mentioned HC refrigerant its recommend to contact the FUCHS application engineers.

#### Specifications

RENISO TRITON SE 55 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**
- **Readily biodegradable**
- **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 55 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 55

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

### Typical data:

Product name	RENISO TRITON SE 55		
Properties	Unit		Test method
Density at 15 °C	kg/m <sup>3</sup>	1009	DIN 51757
Flash point	°C	286	DIN ISO 2592
Colour	-	0.5	DIN ISO 2049
Kinematic viscosity at 40 °C	mm <sup>2</sup> /s	55	DIN EN ISO 3104
at 100 °C	mm <sup>2</sup> /s	8.8	
Viscosity index	-	137	DIN ISO 2909
Pourpoint	°C	-48	DIN ISO 3016
Neutralisation number	mgKOH/g	0.03	DIN 51558-1
Water content	mg/kg	< 50	DIN 51777-2
Rapidly biodegradable	-	yes	OECD 301 B

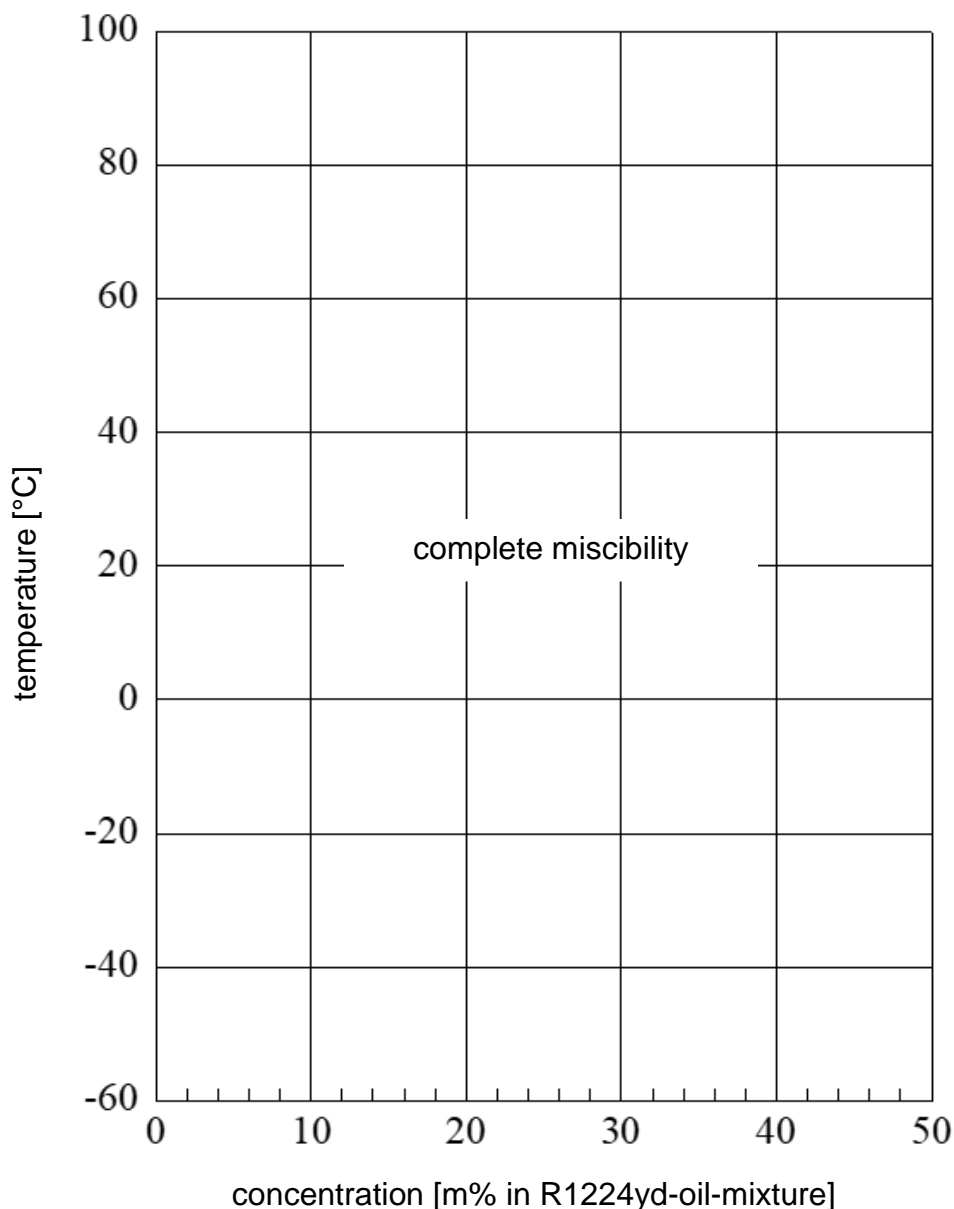
### Specifications

NSF H2 registration:  
registration no. 146754

## RENISO TRITON SE 55

**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 55 and R1224yd

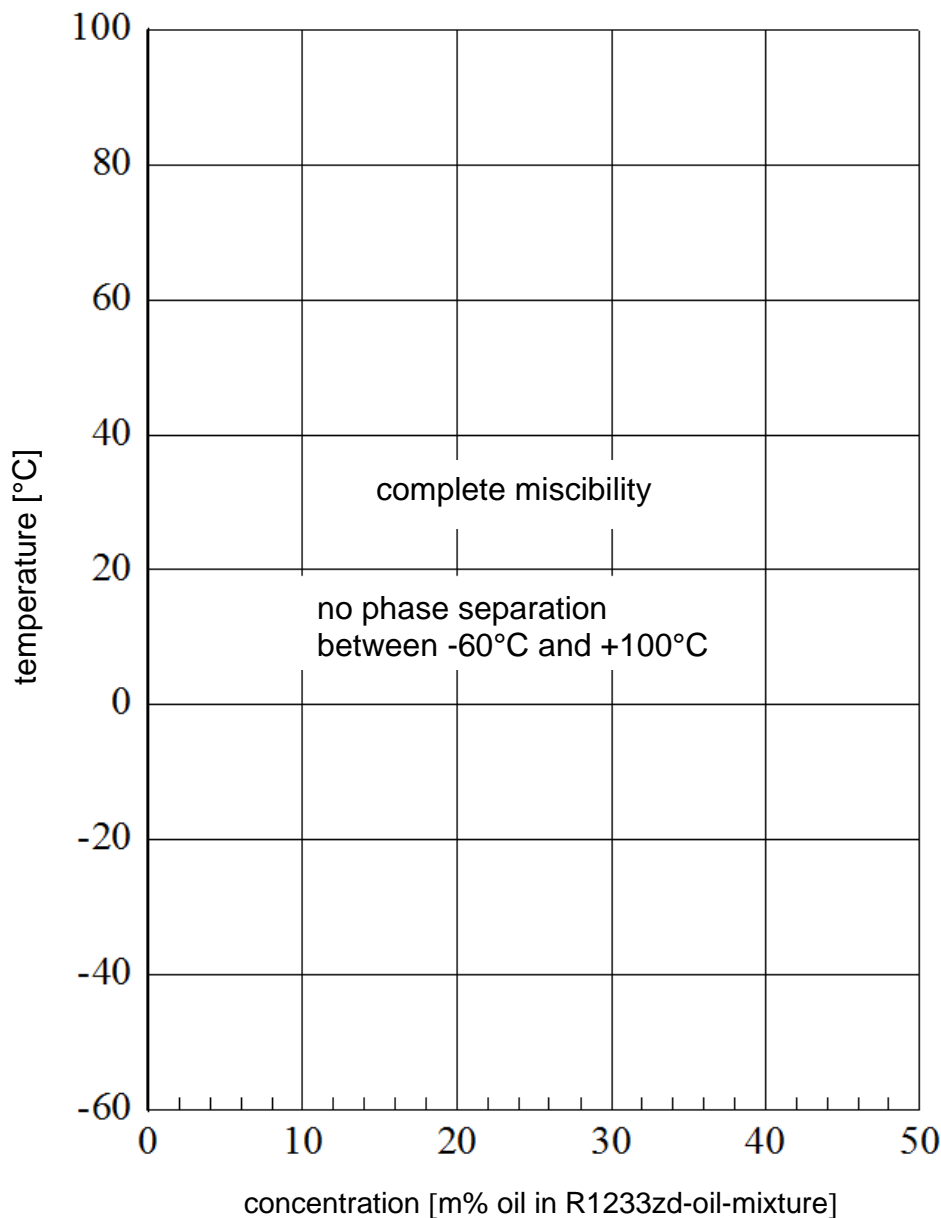


PI 4-1329, Page 3; PM 4 – 08.21

## RENISO TRITON SE 55

**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 55 and R1223zd**

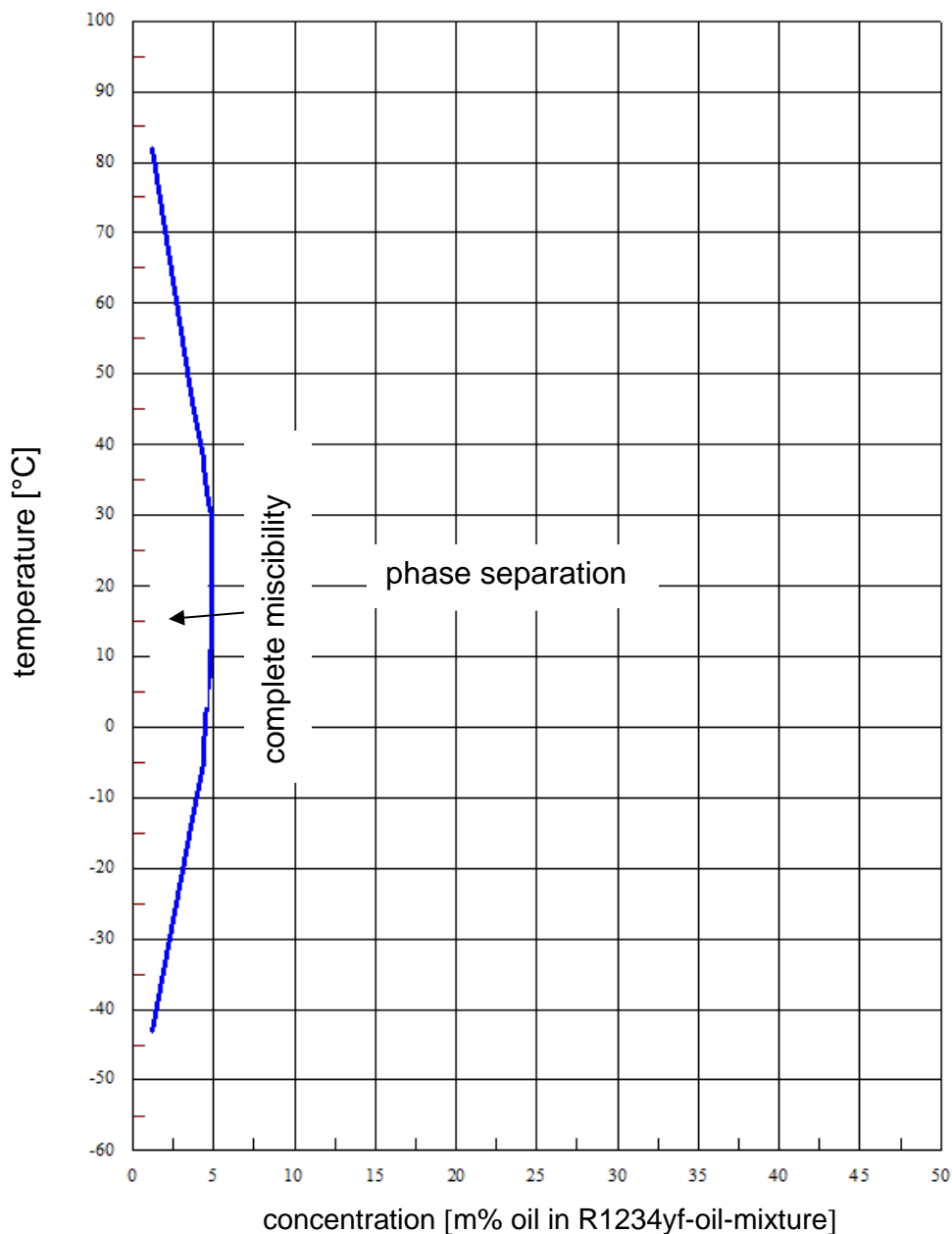


PI 4-1329, Page 4; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R1234yf

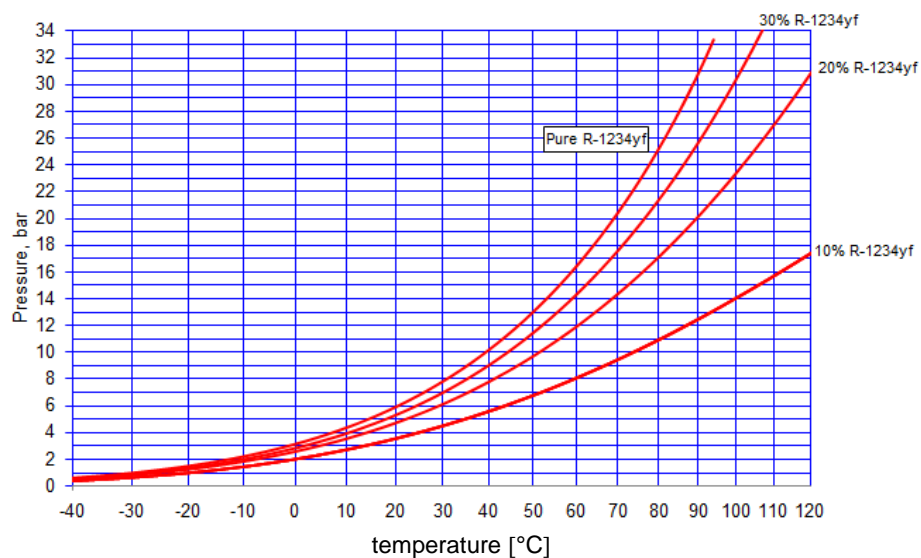
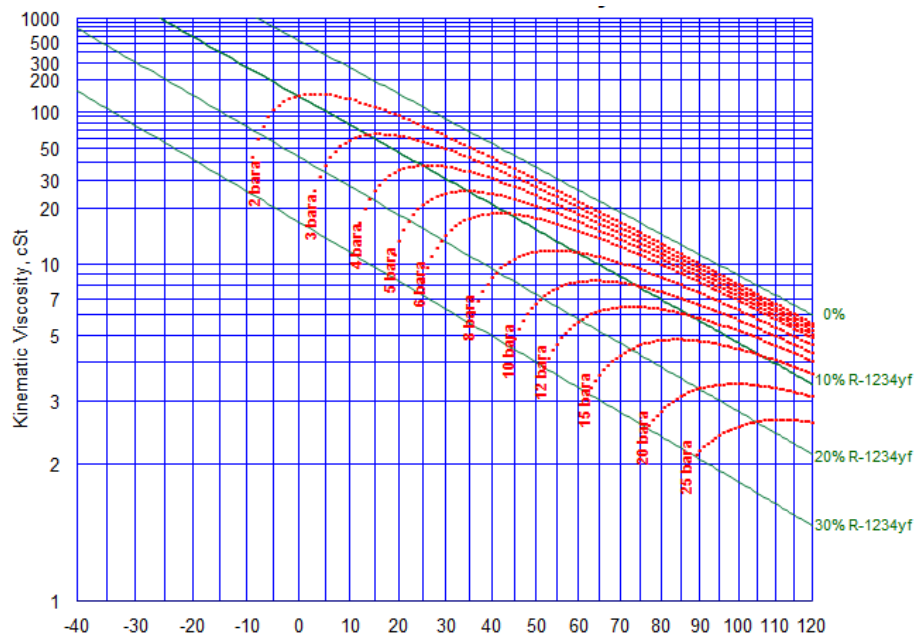


PI 4-1329, Page 5; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R1234yf

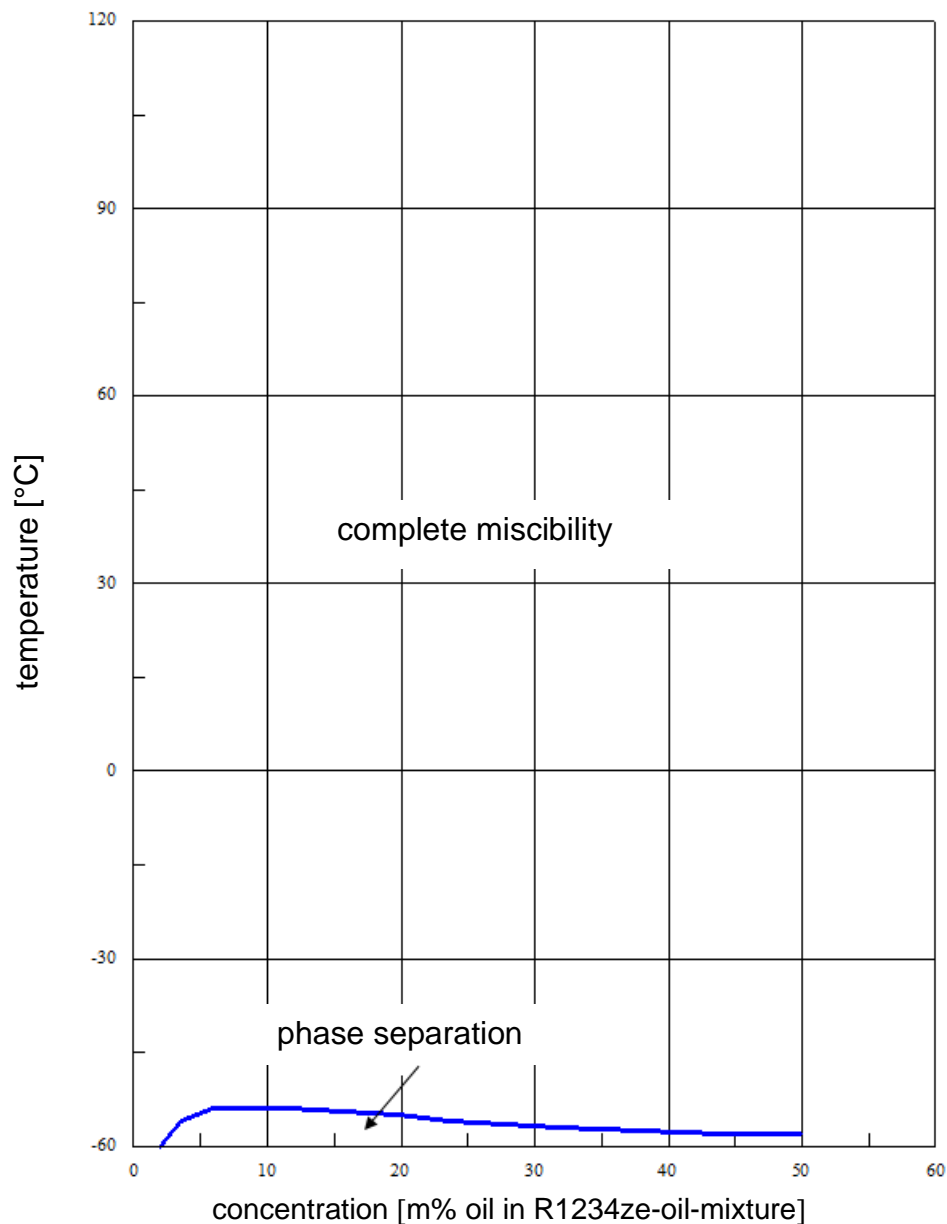


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R1234ze

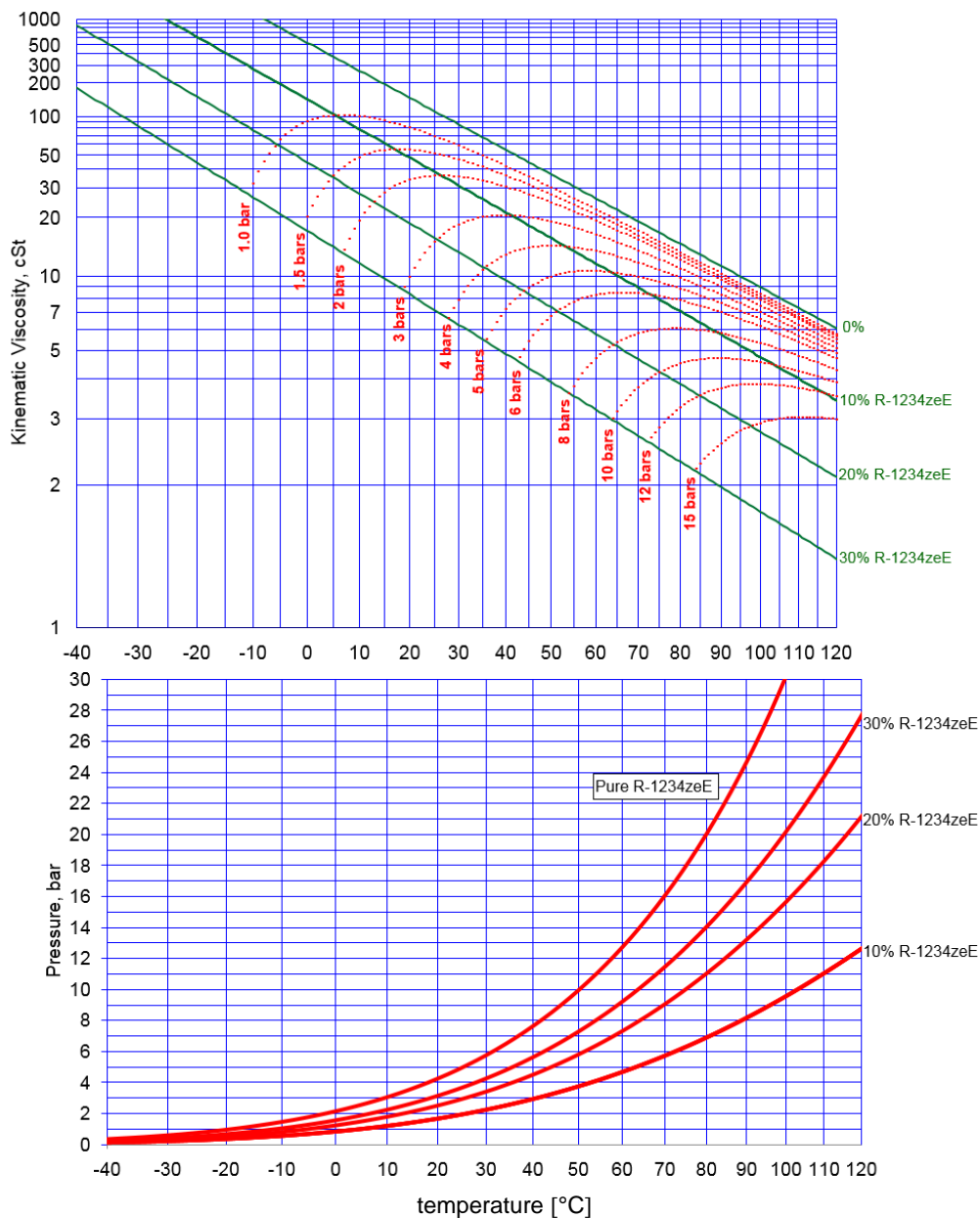


PI 4-1329, Page 7; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R1234ze

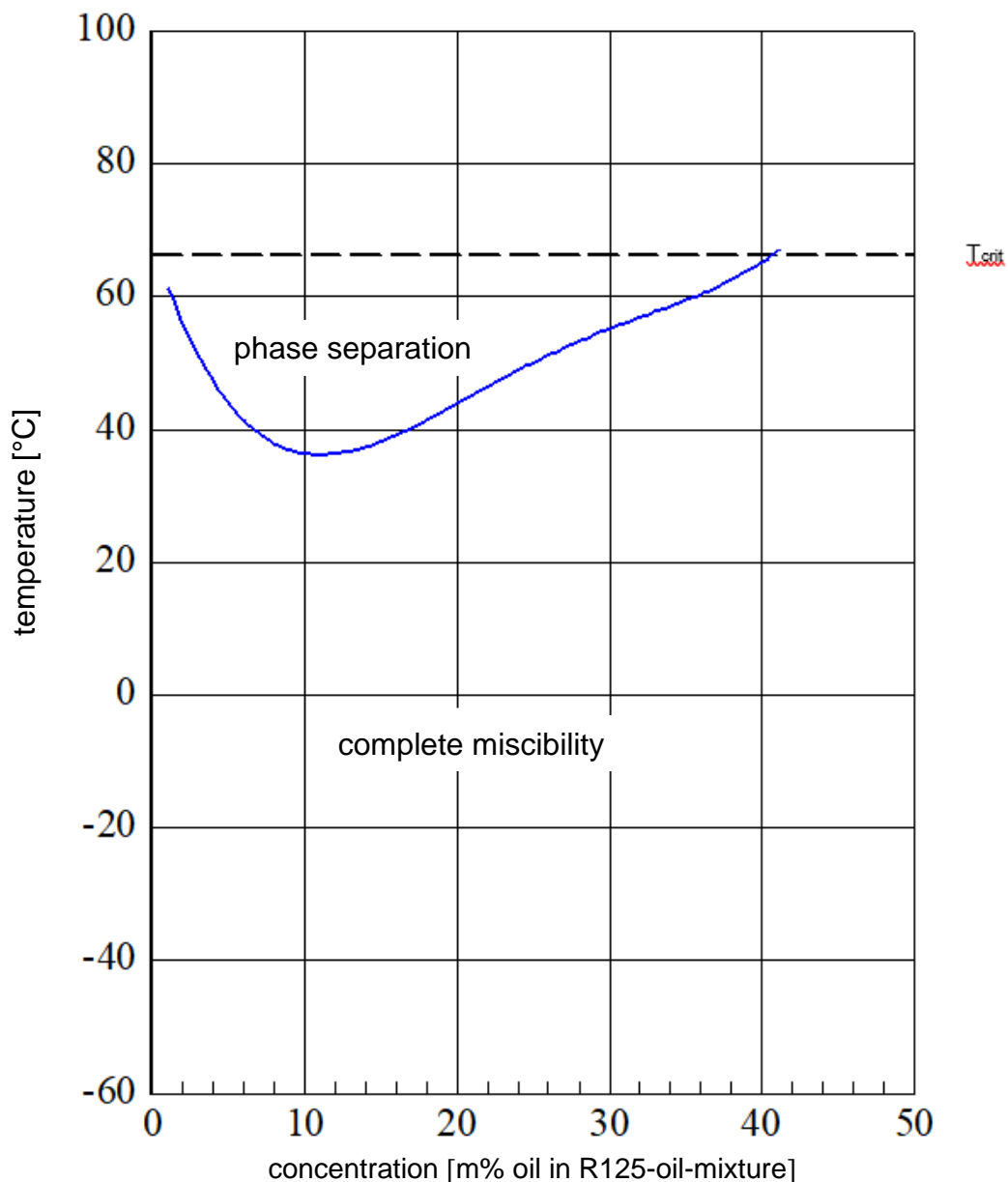


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R125

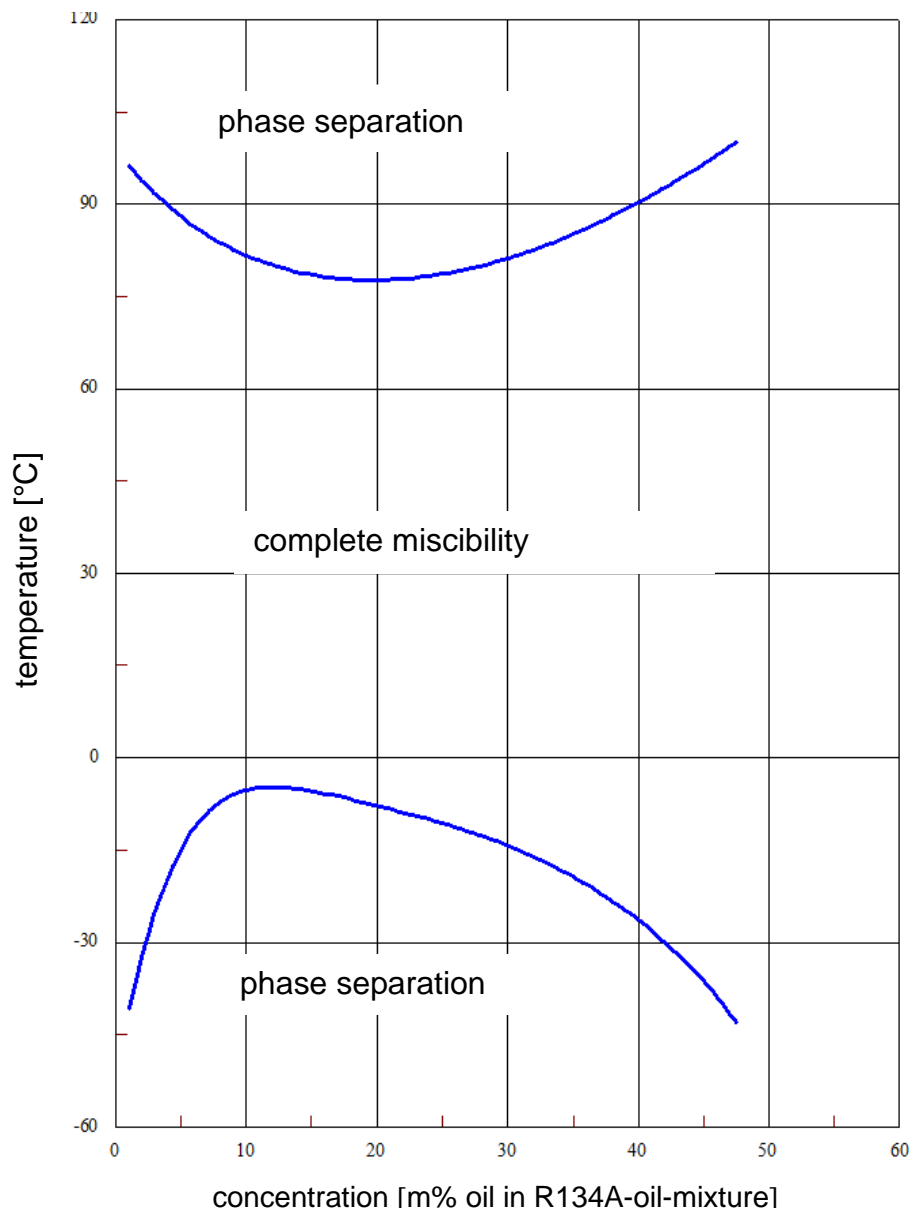


PI 4-1329, Page 9; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R134A

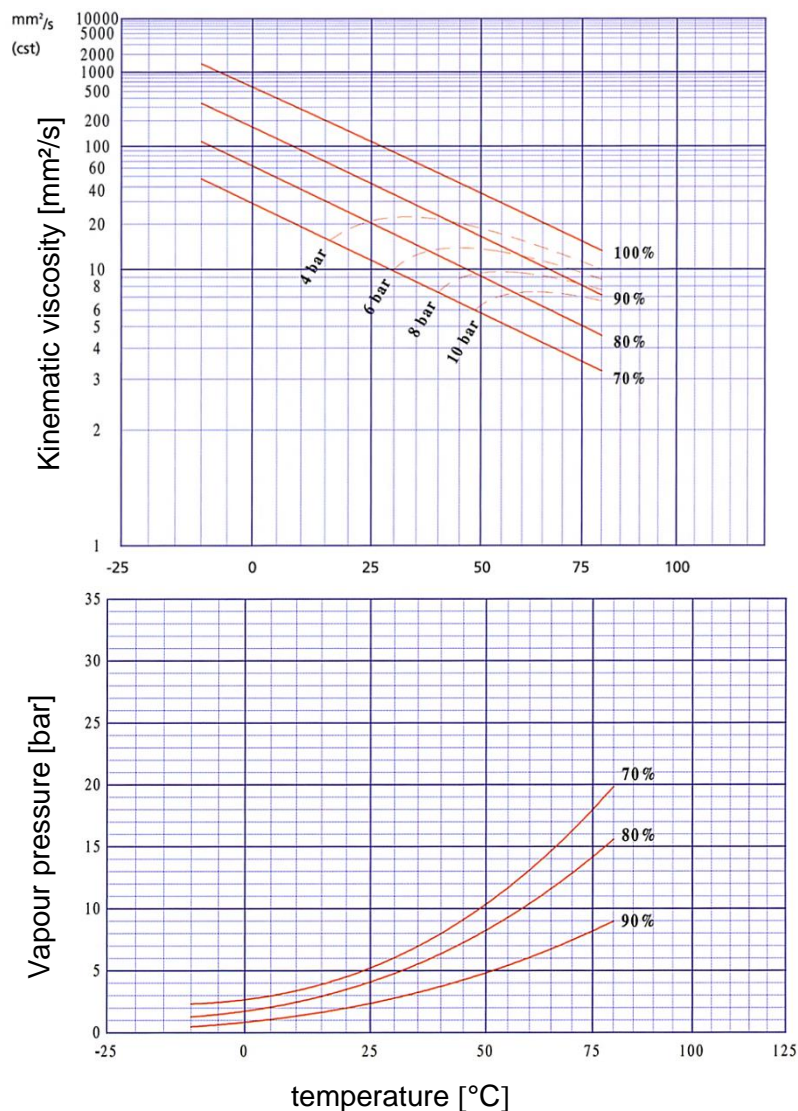


PI 4-1329, Page 10; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R134A

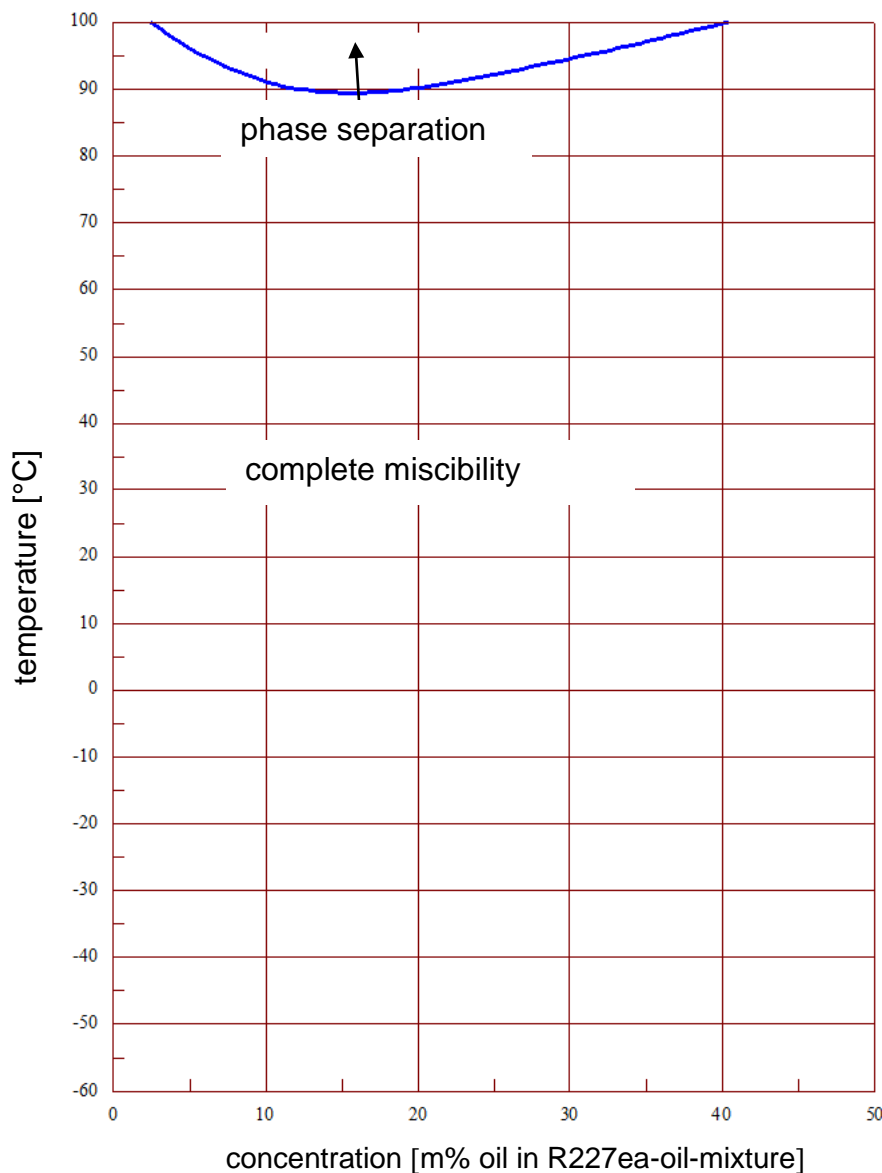


All % figures represent m% oil in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R227ea

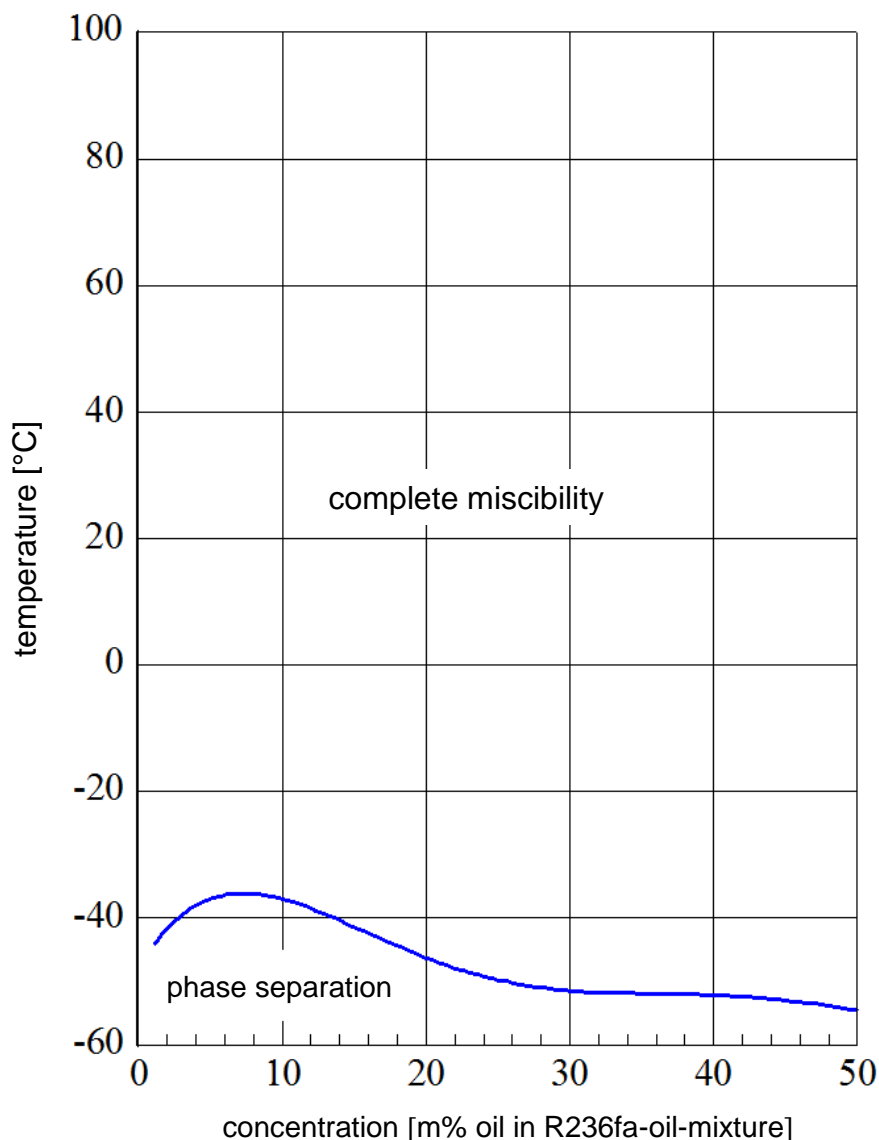


PI 4-1329, Page 12; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R236fa

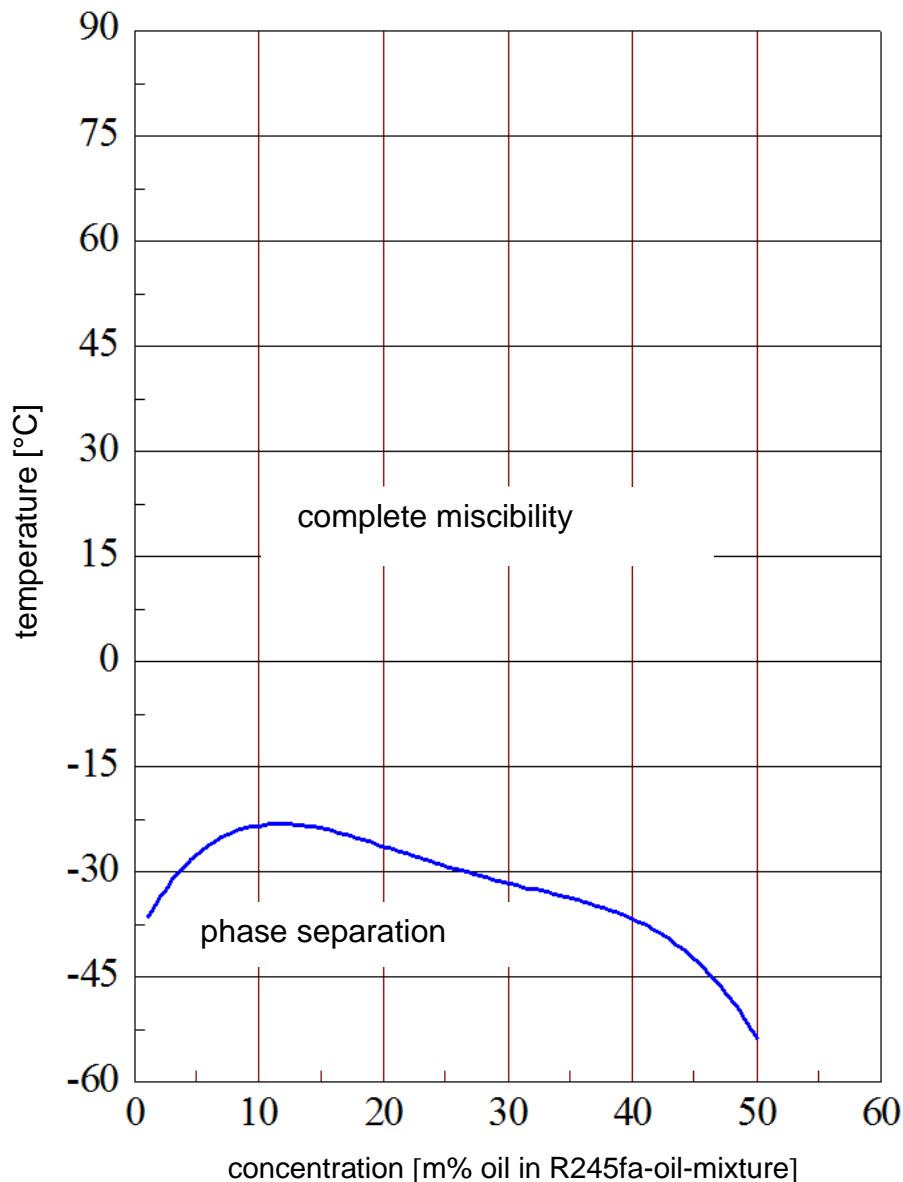


PI 4-1329, Page 13; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R245fa

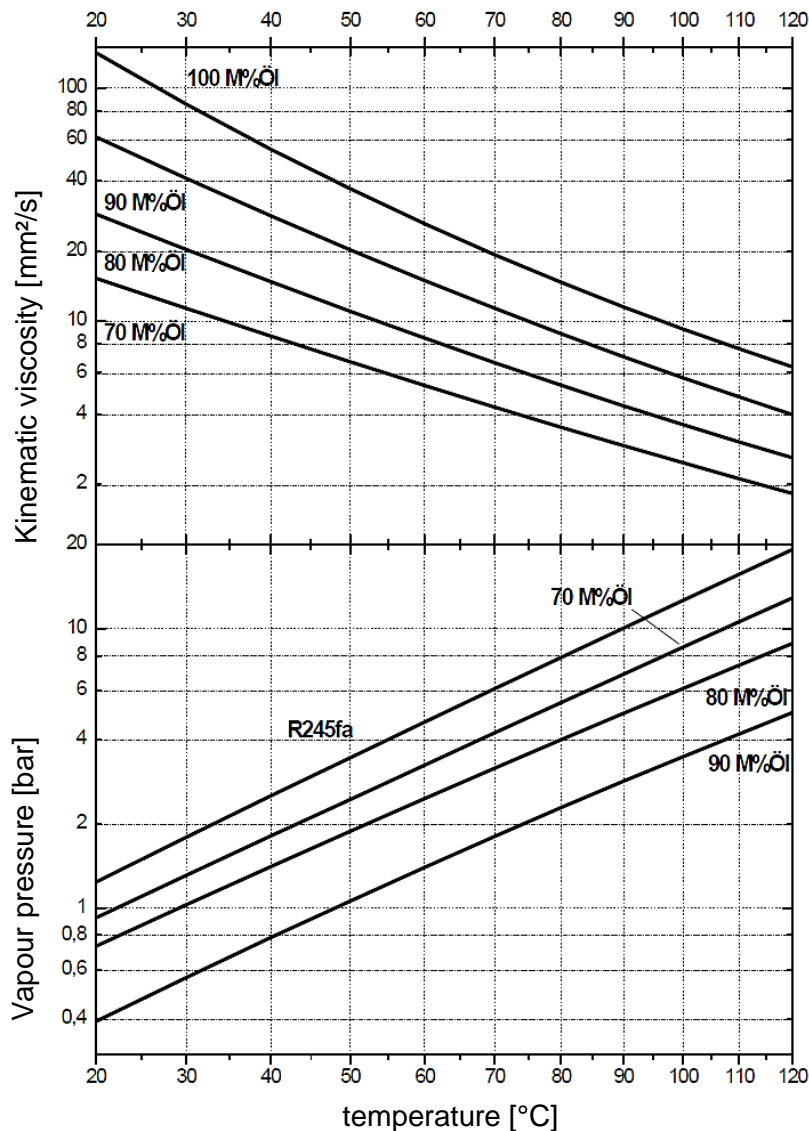


PI 4-1329, Page 14; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R245fa

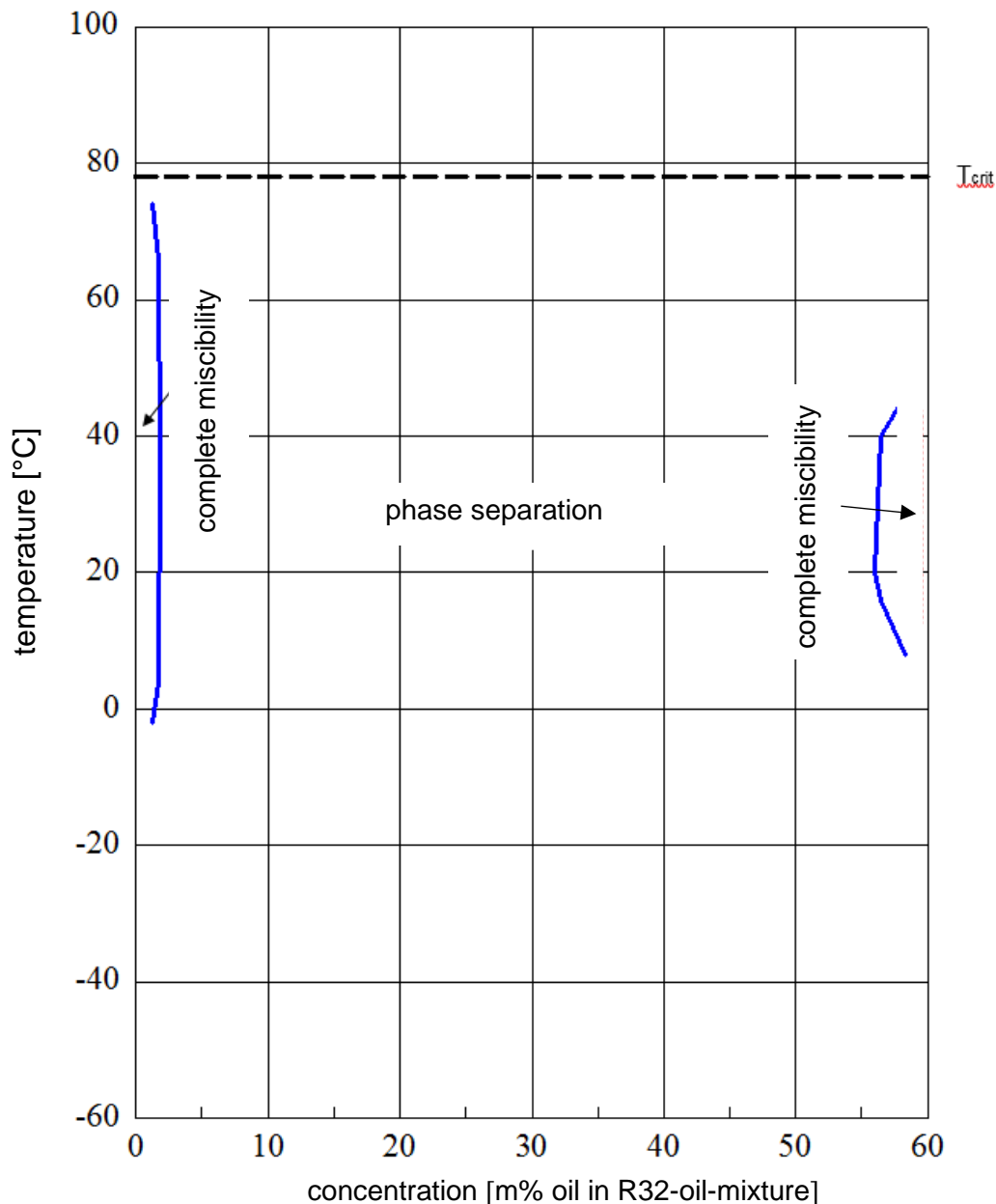


All % figures represent m% oil in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R32

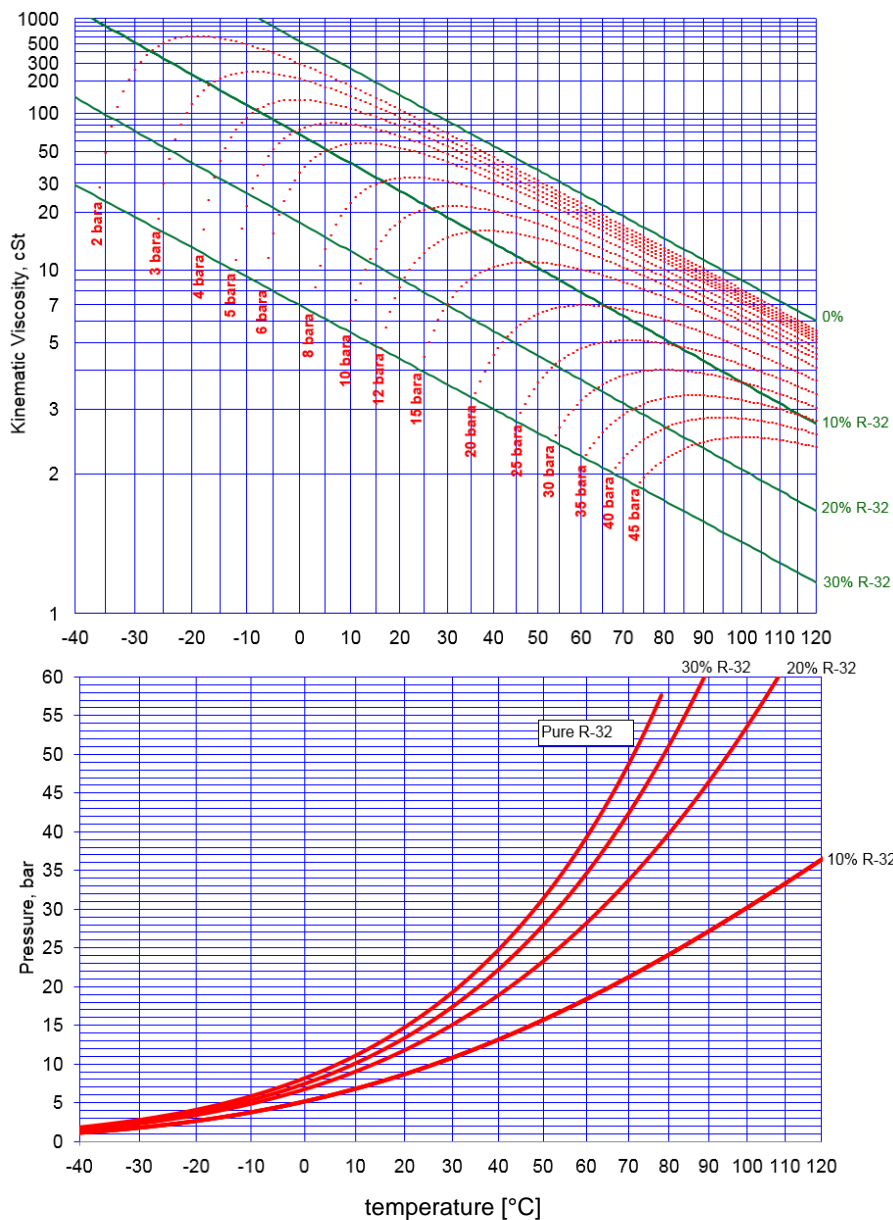


PI 4-1329, Page 16; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R32

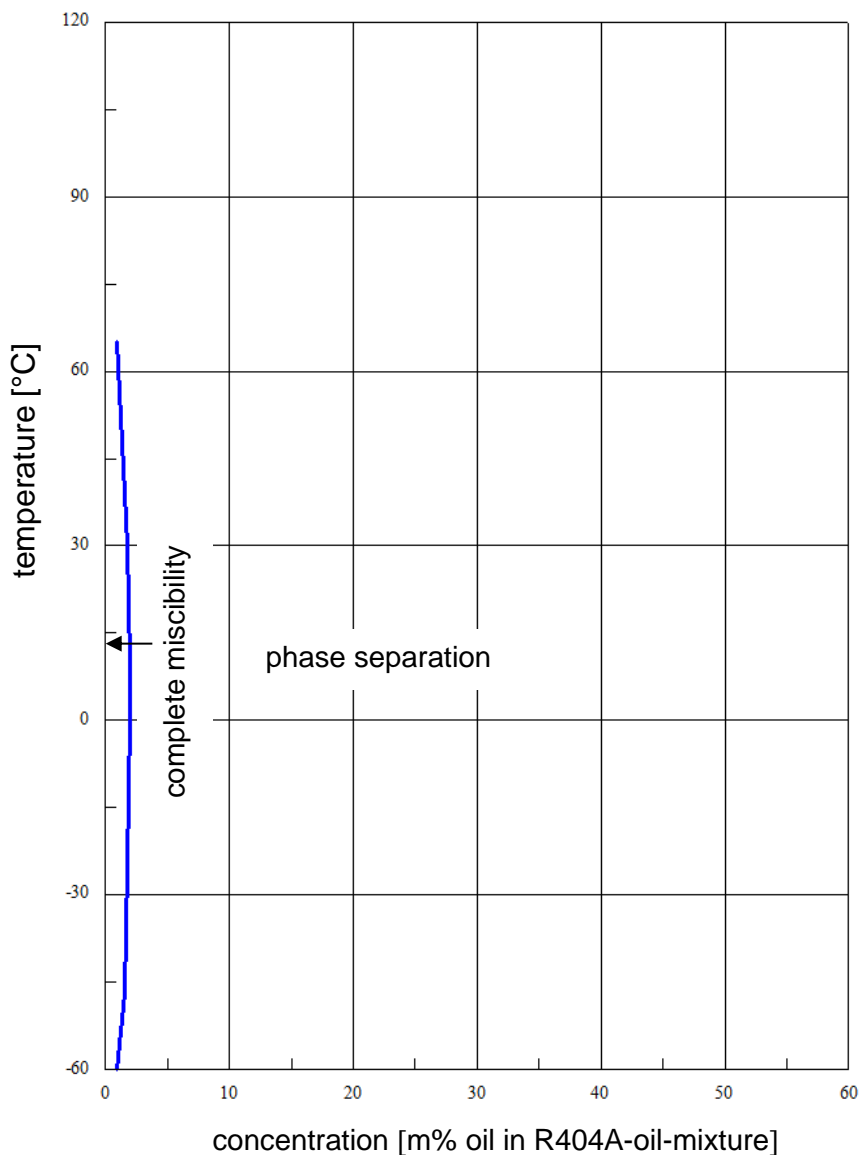


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R404A

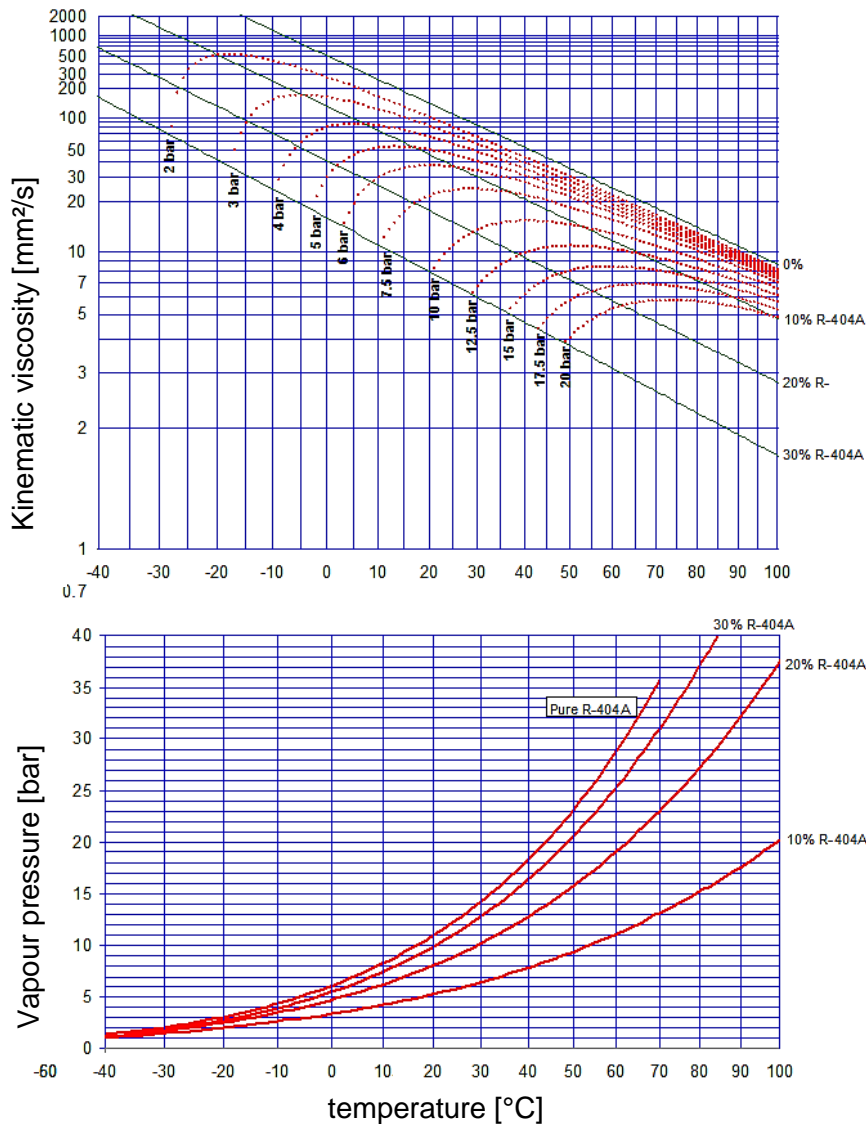


PI 4-1329, Page 18; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R404A

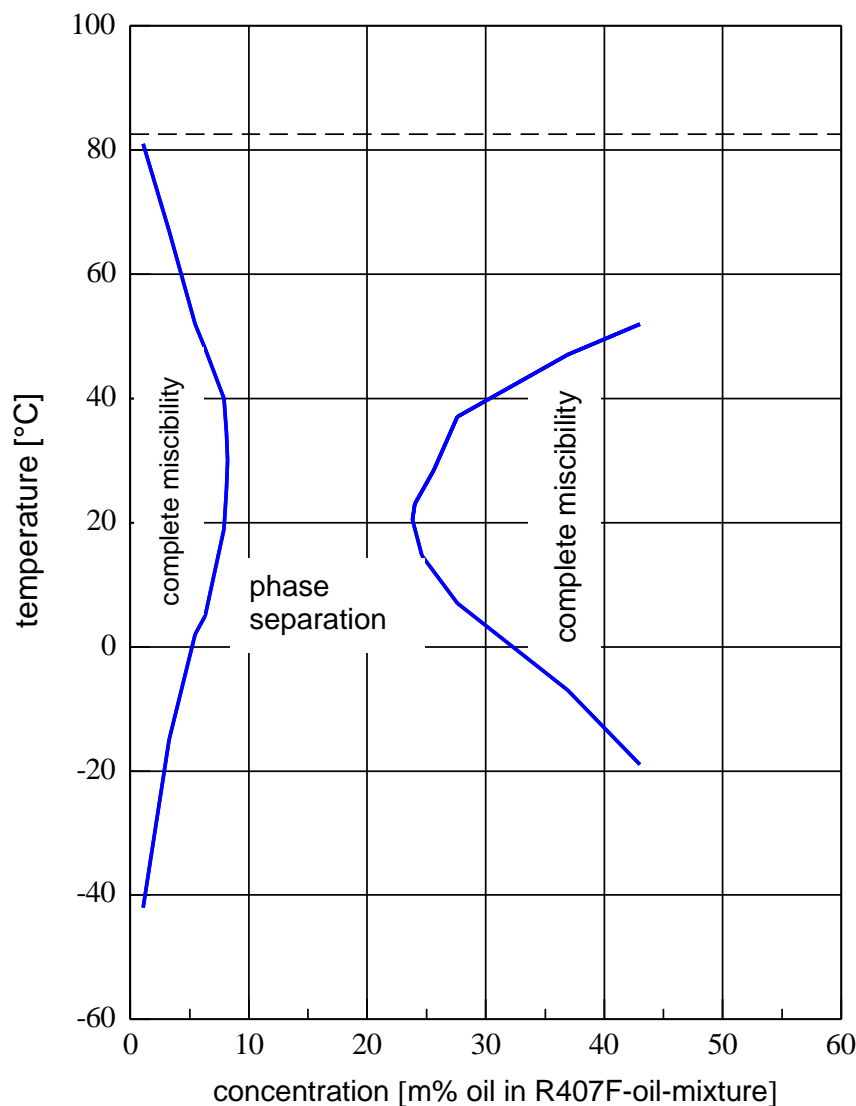


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R407F

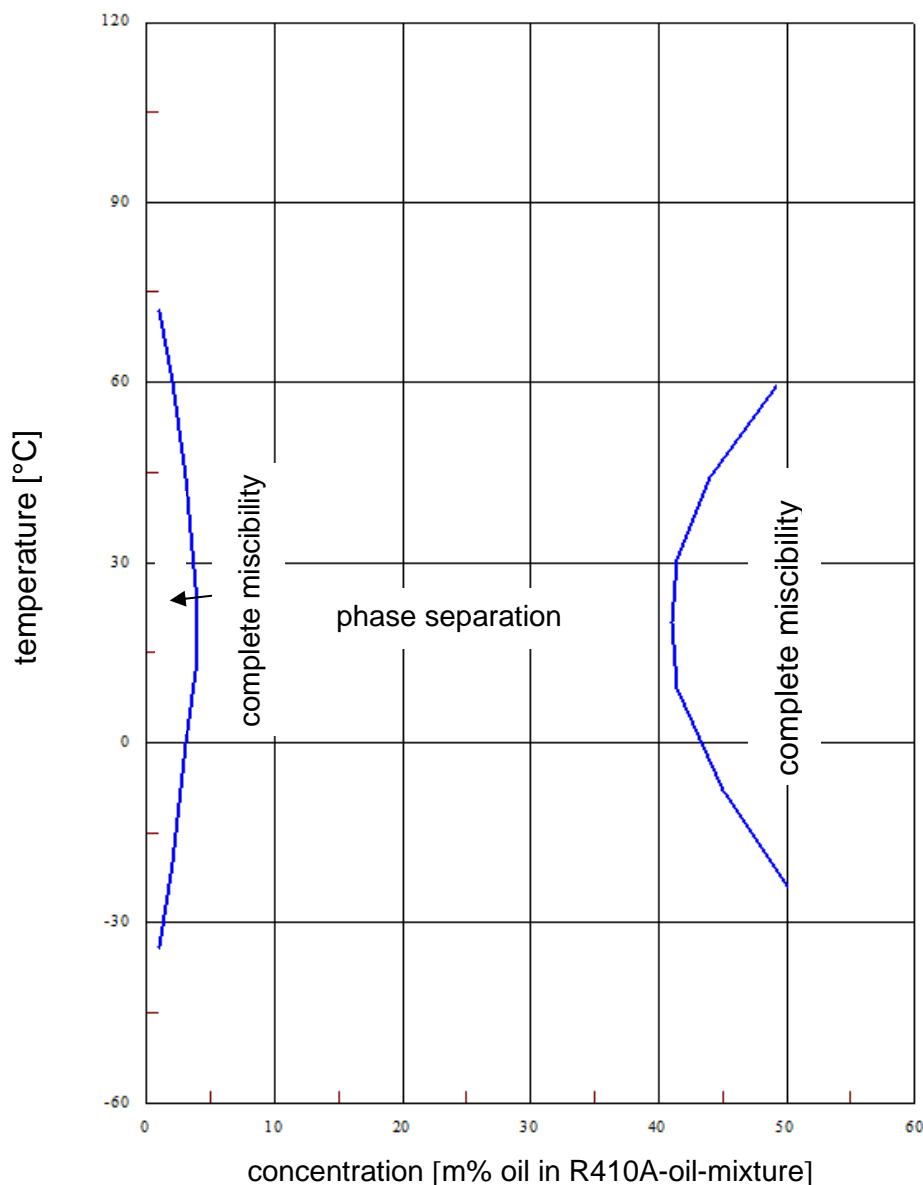


PI 4-1329, Page 20; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R410A

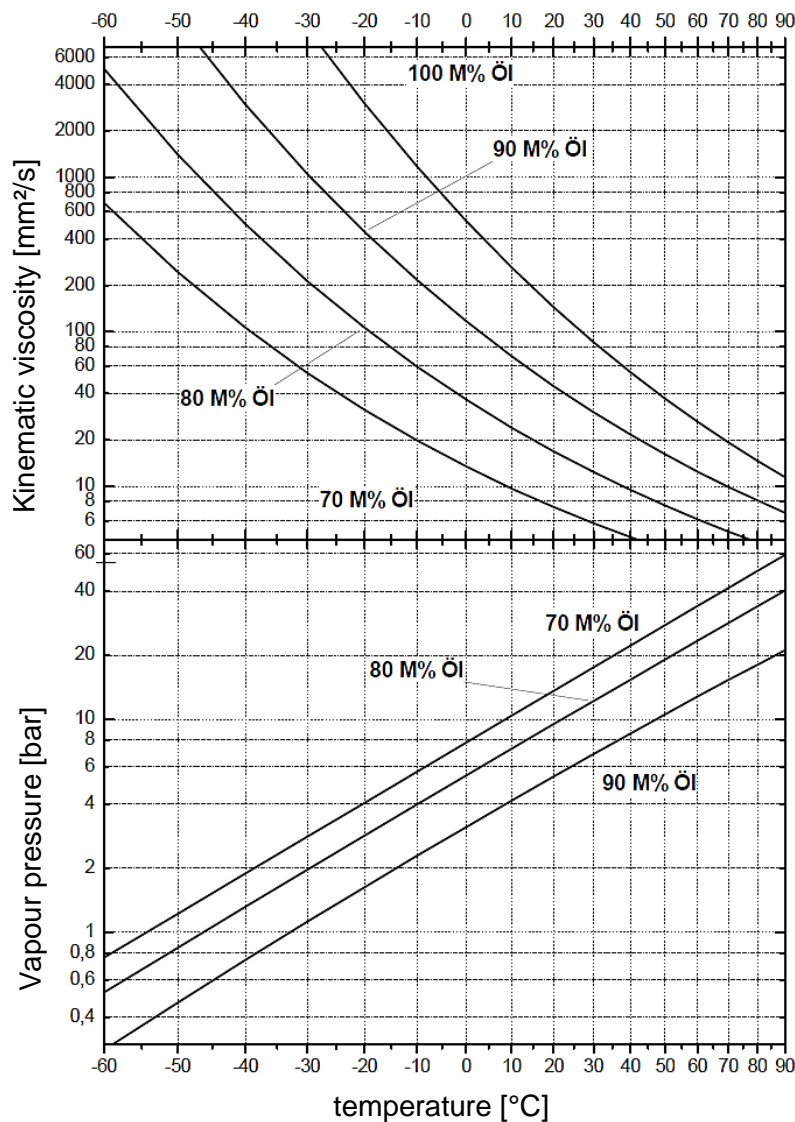


PI 4-1329, Page 21; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R410A

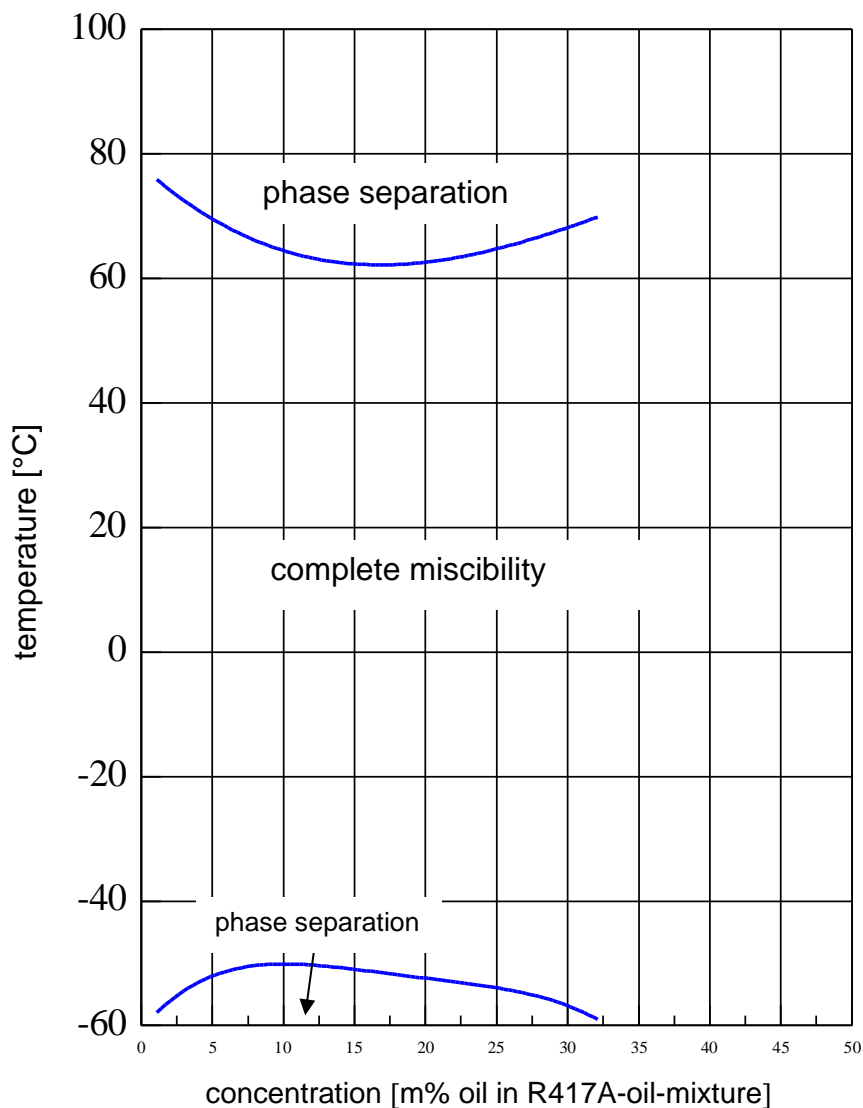


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R417A

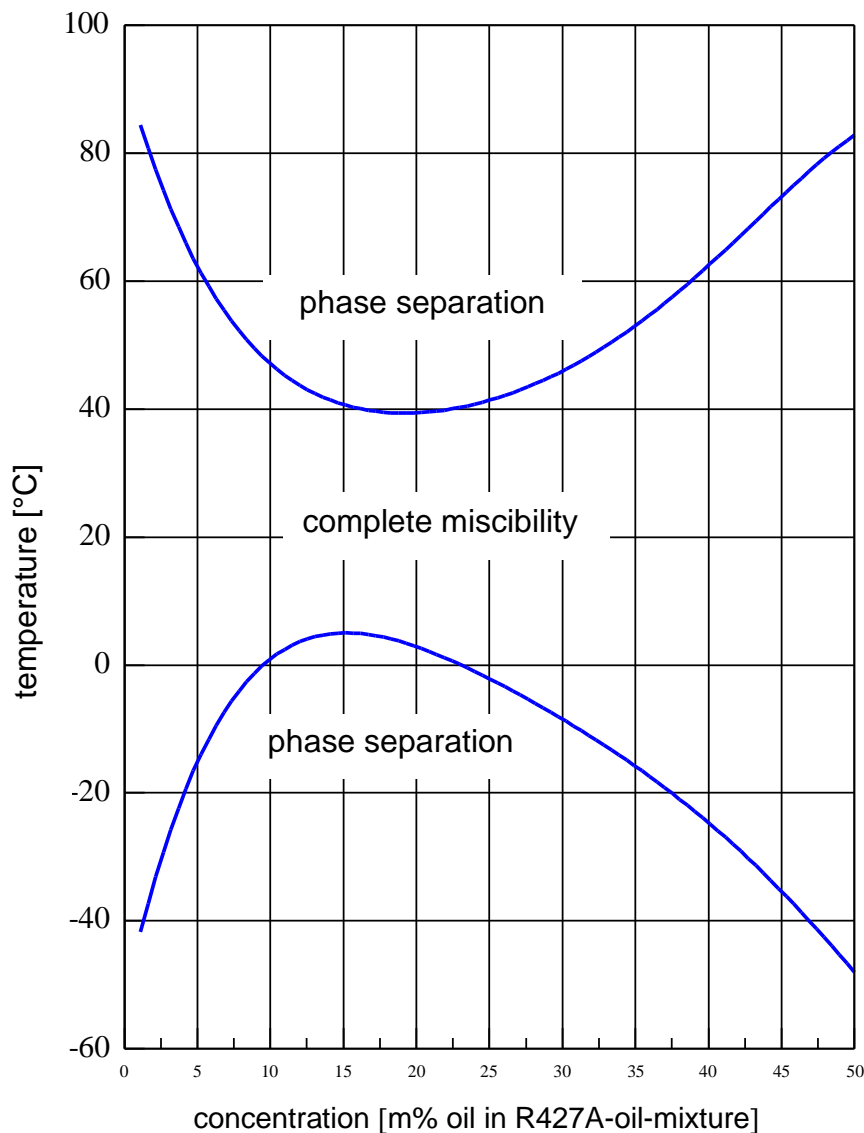


PI 4-1329, Page 23; PM 4 – 08.21

## RENISO TRITON SE 55

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

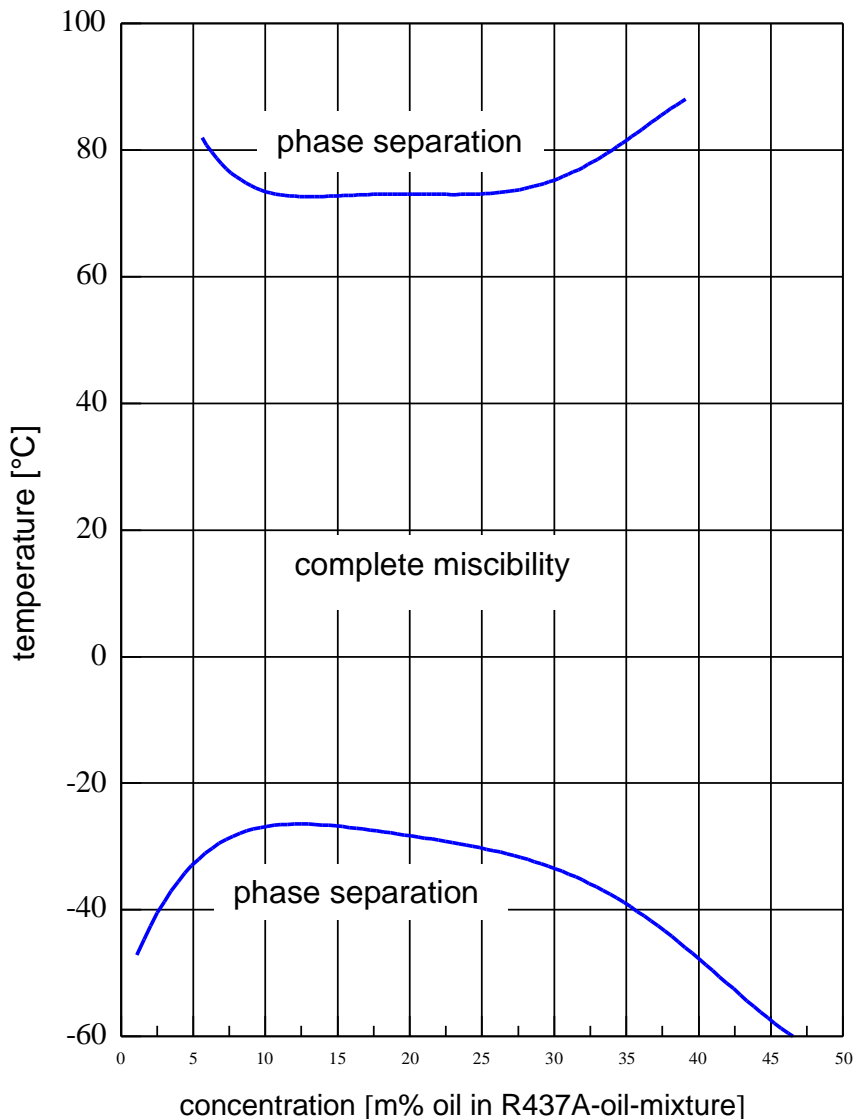
Miscibility behaviour (miscibility gap): RENISO TRITON SE 55 and R427A



## RENISO TRITON SE 55

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 55 and R437A

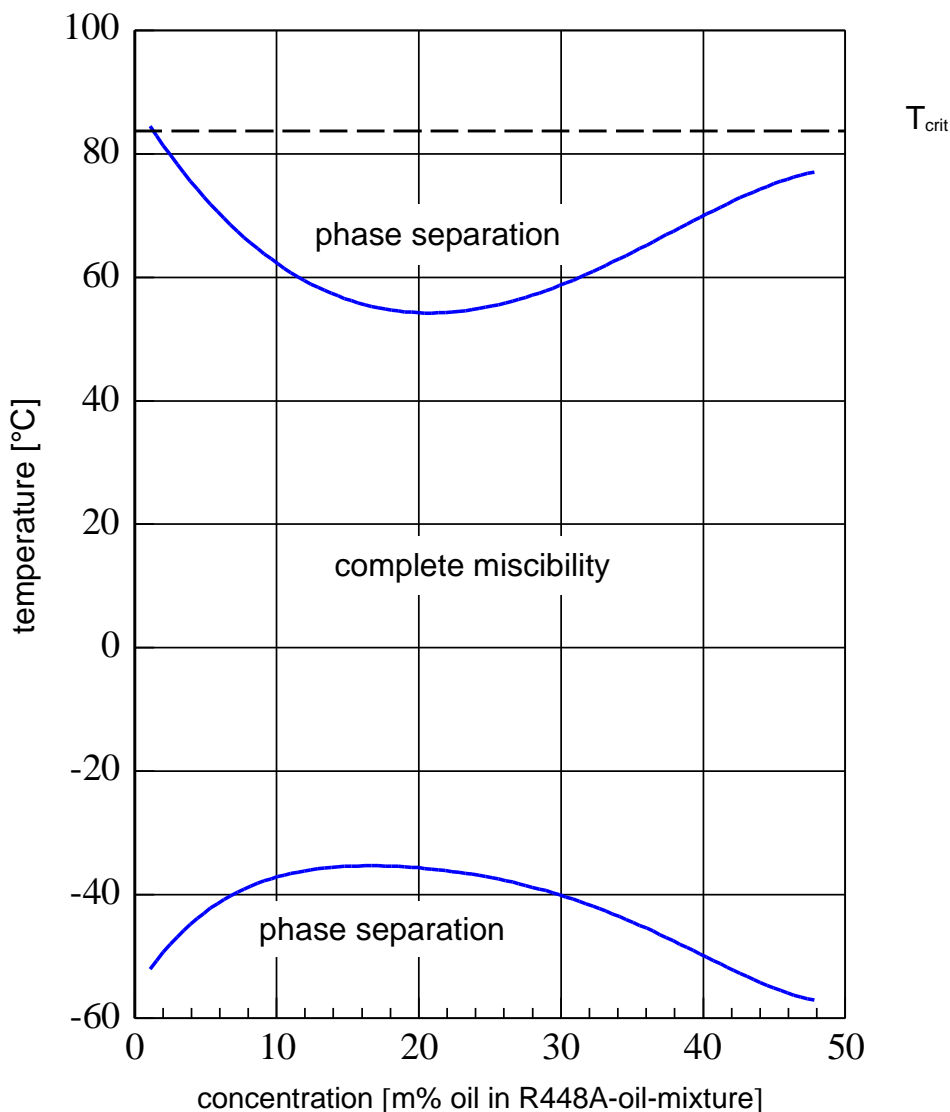


PI 4-1329, Page 25; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R448A

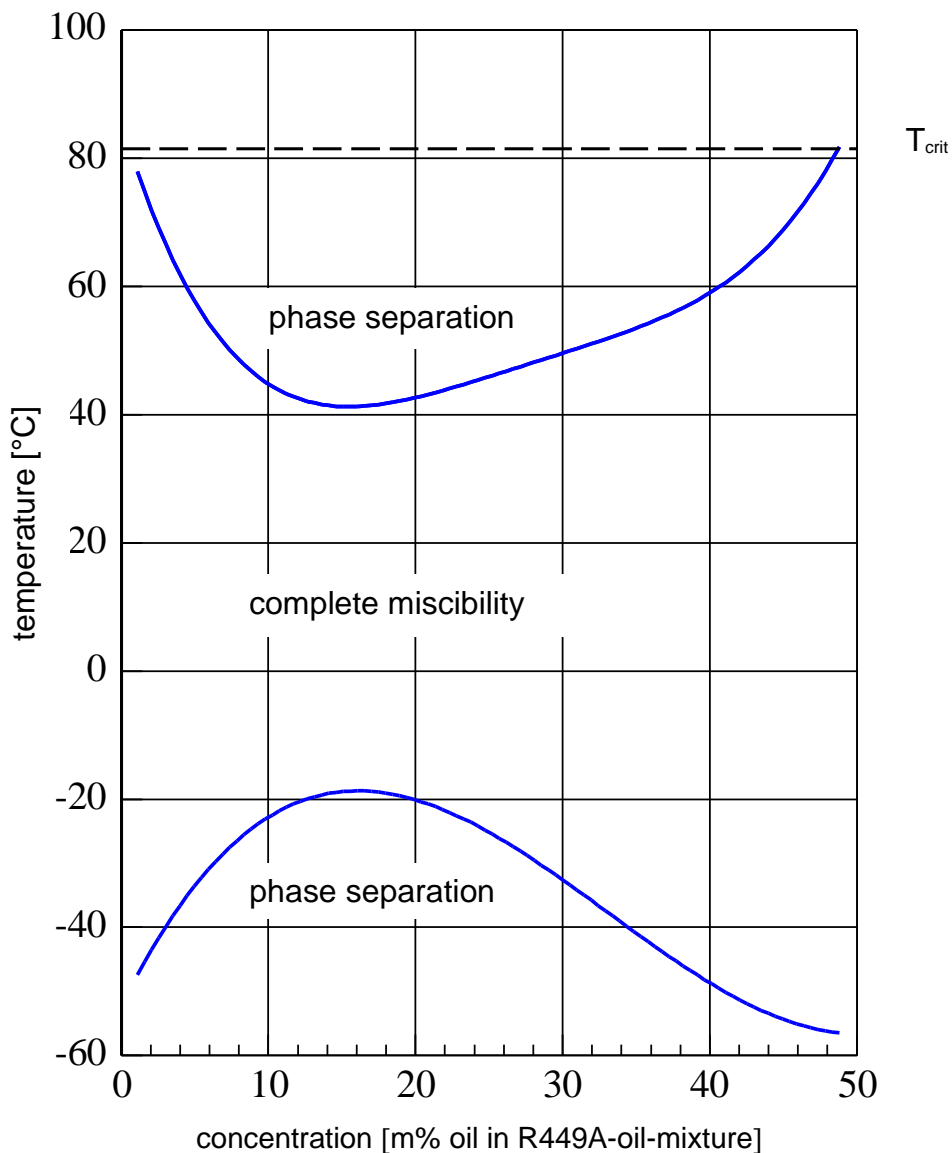


PI 4-1329, Page 26; PM 4 – 08.21

## RENISO TRITON SE 55

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

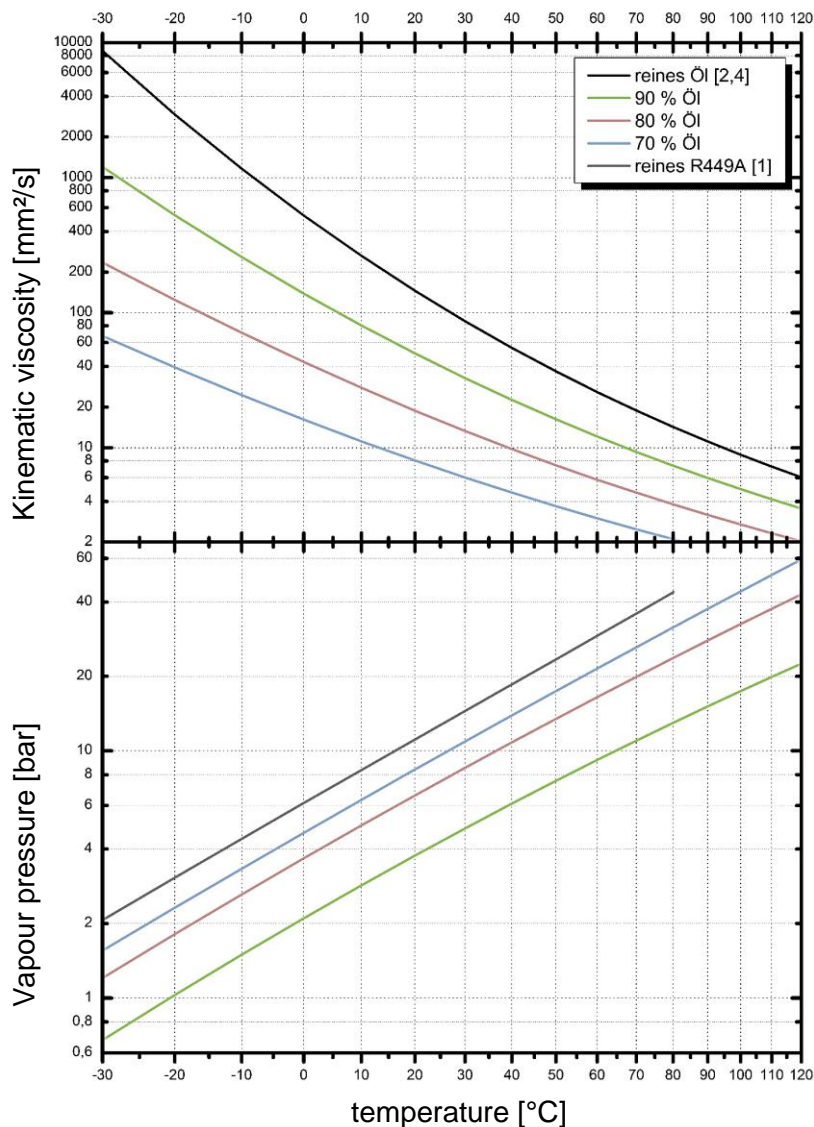
Miscibility behaviour (miscibility gap): RENISO TRITON SE 55 and R449A



## RENISO TRITON SE 55

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 55 and R449A

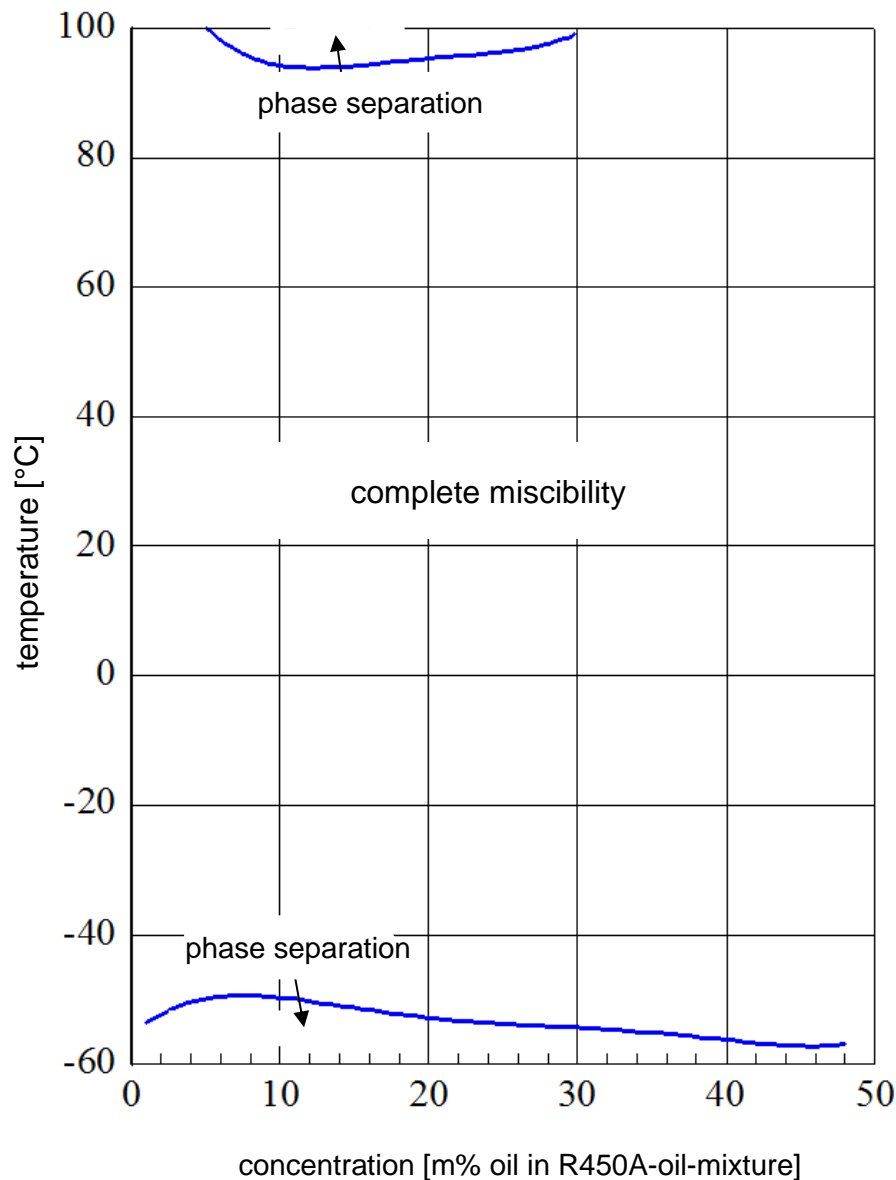


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R450A

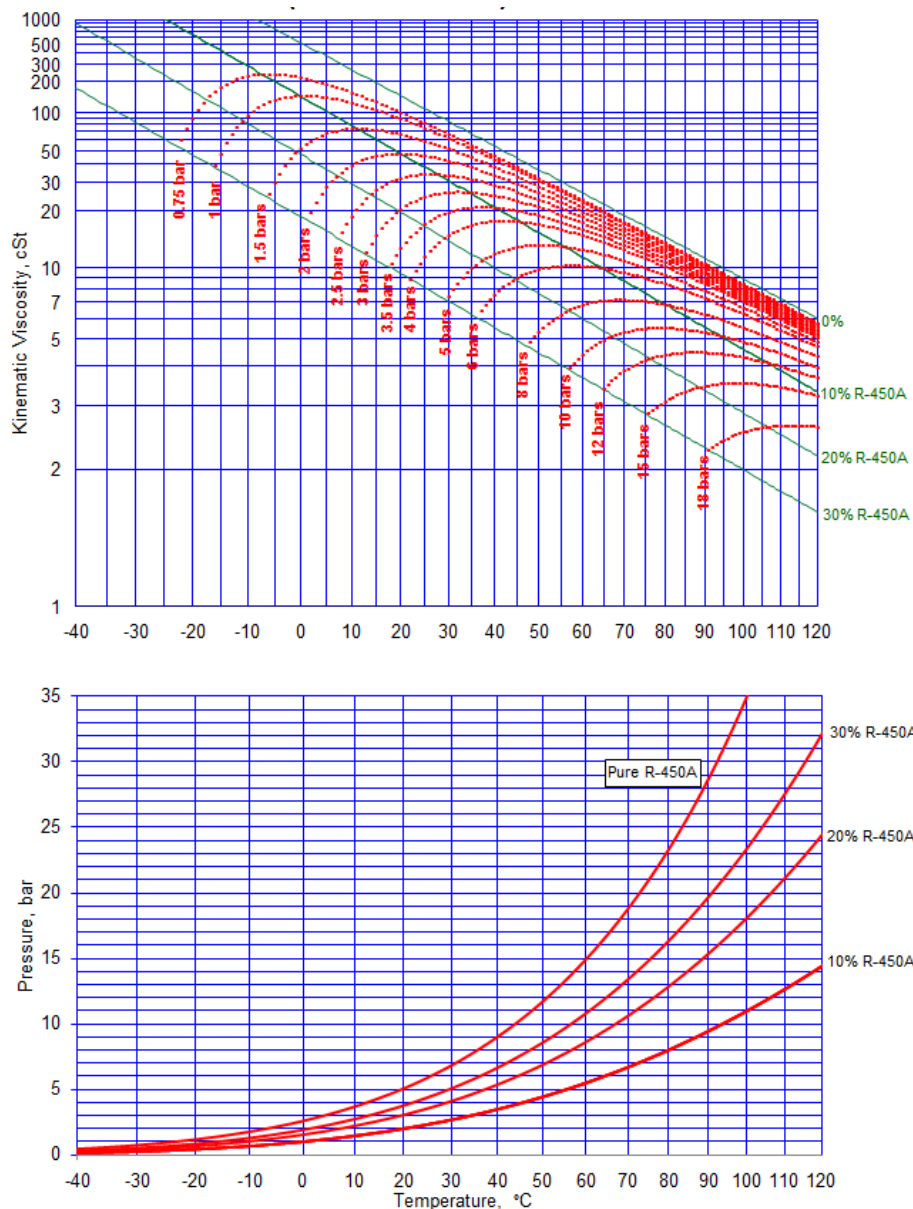


PI 4-1329, Page 29; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R450A



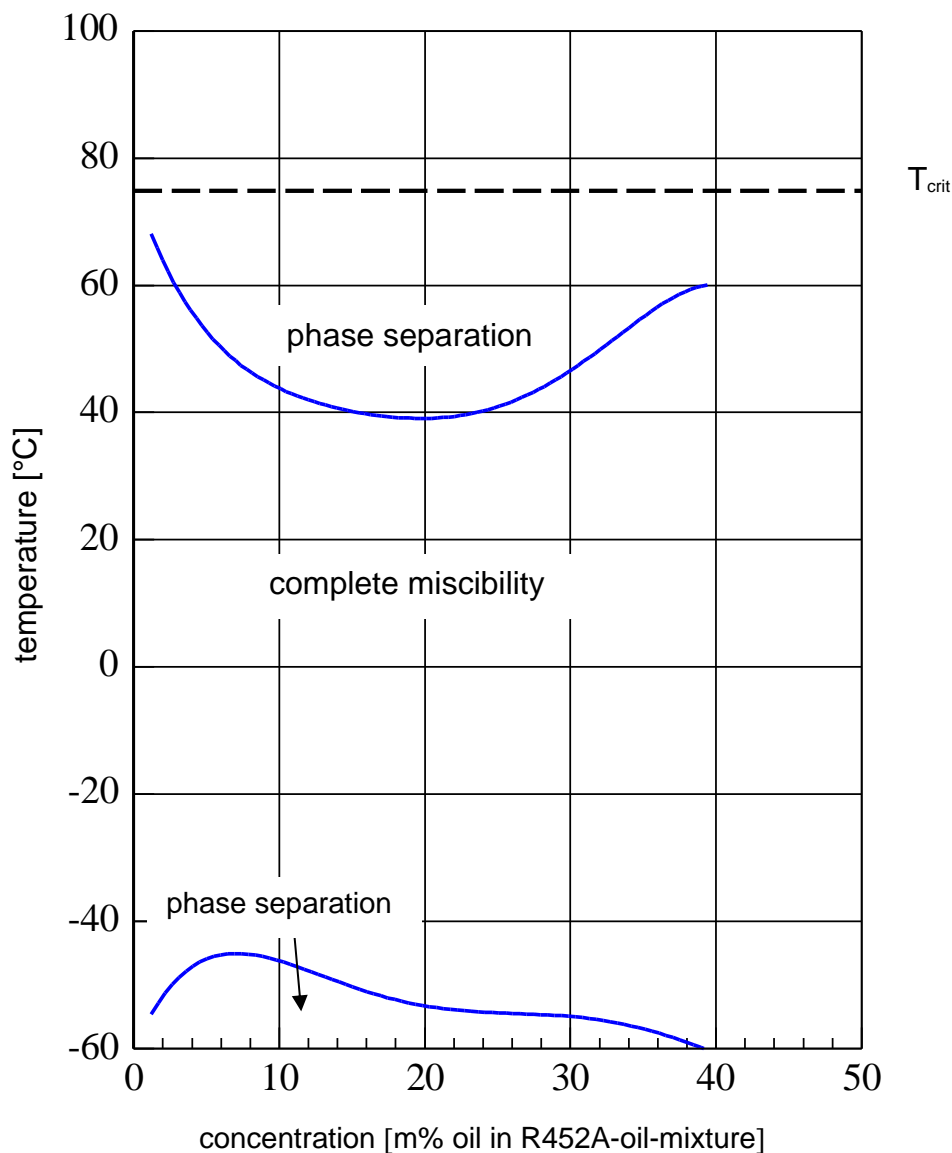
All % figures represent m% refrigerant in the refrigerant-oil-mixture.

PI 4-1329, Page 30; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R452A

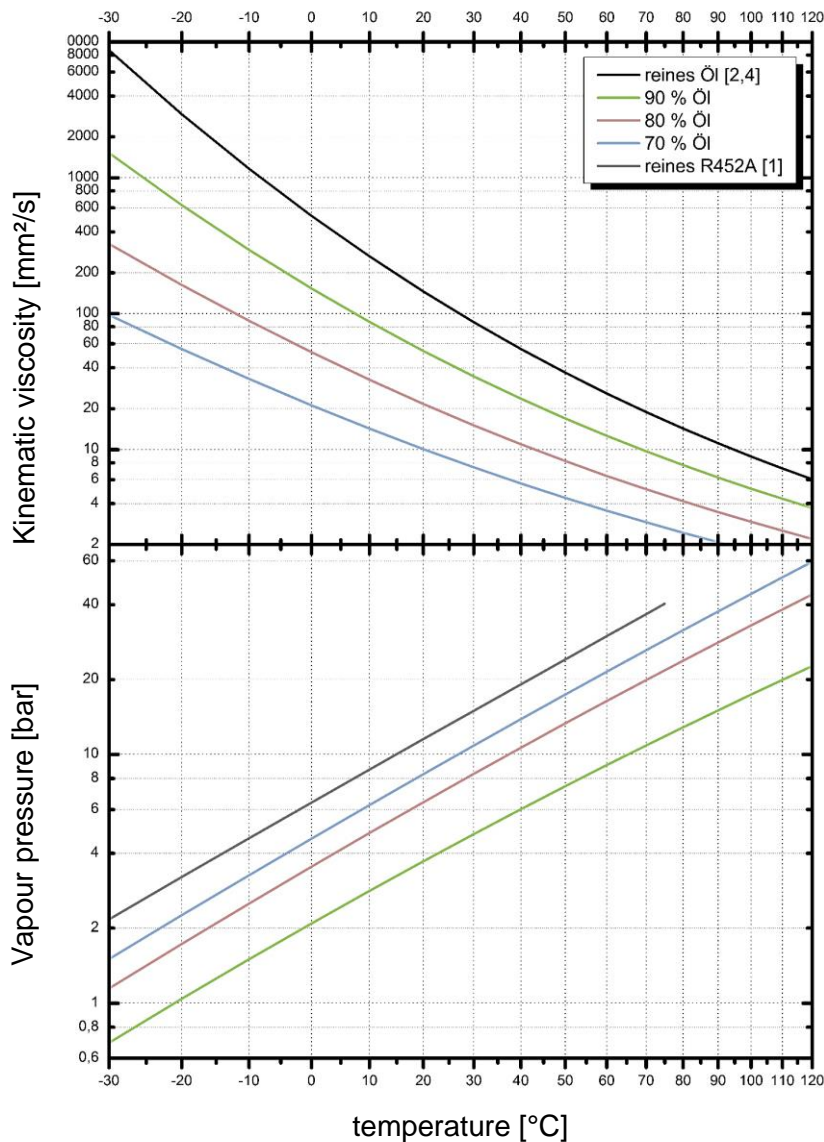


PI 4-1329, Page 31; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R452A

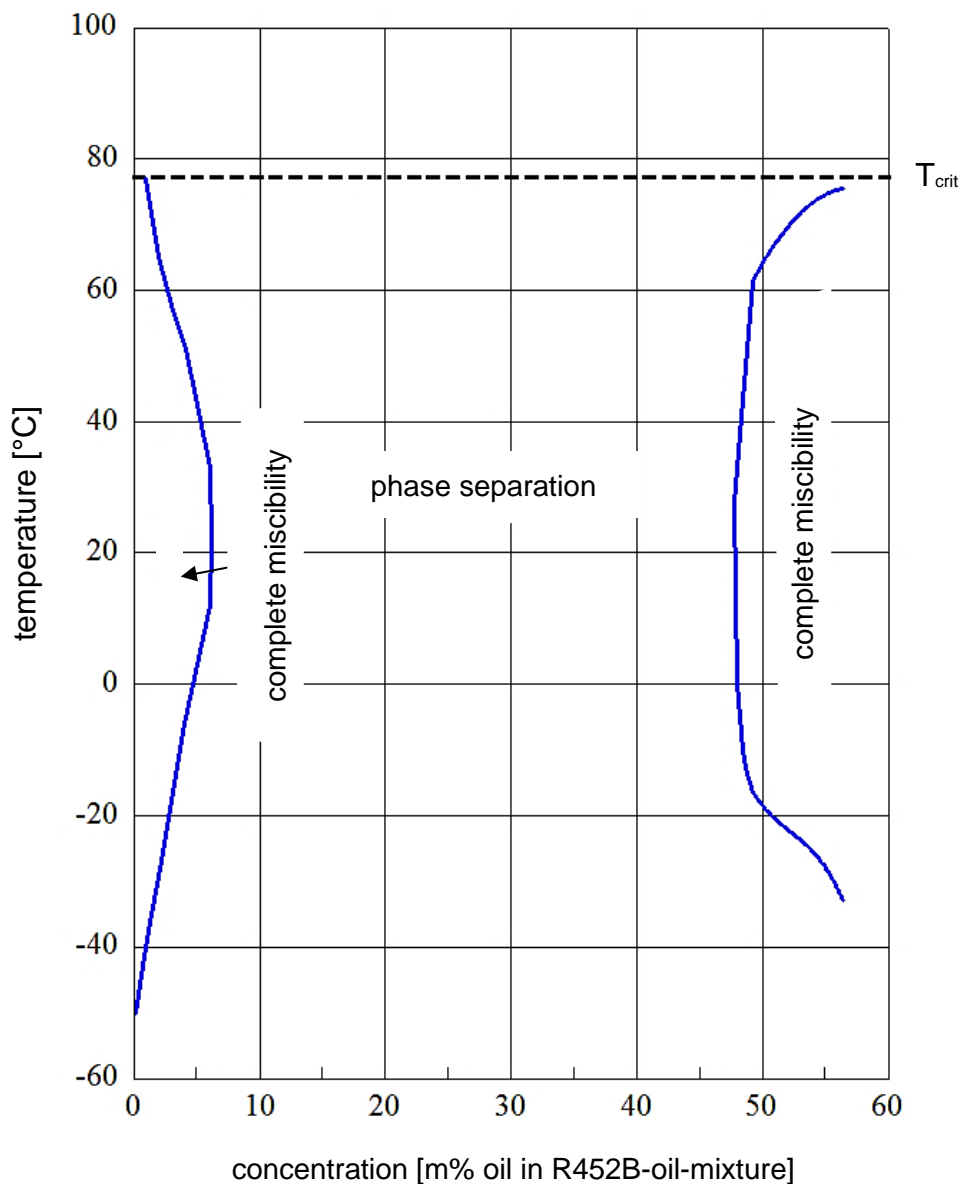


All % figures represent m% refrigerant in the refrigerant-oil-mixture.

## RENISO TRITON SE 55

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 55 and R452B

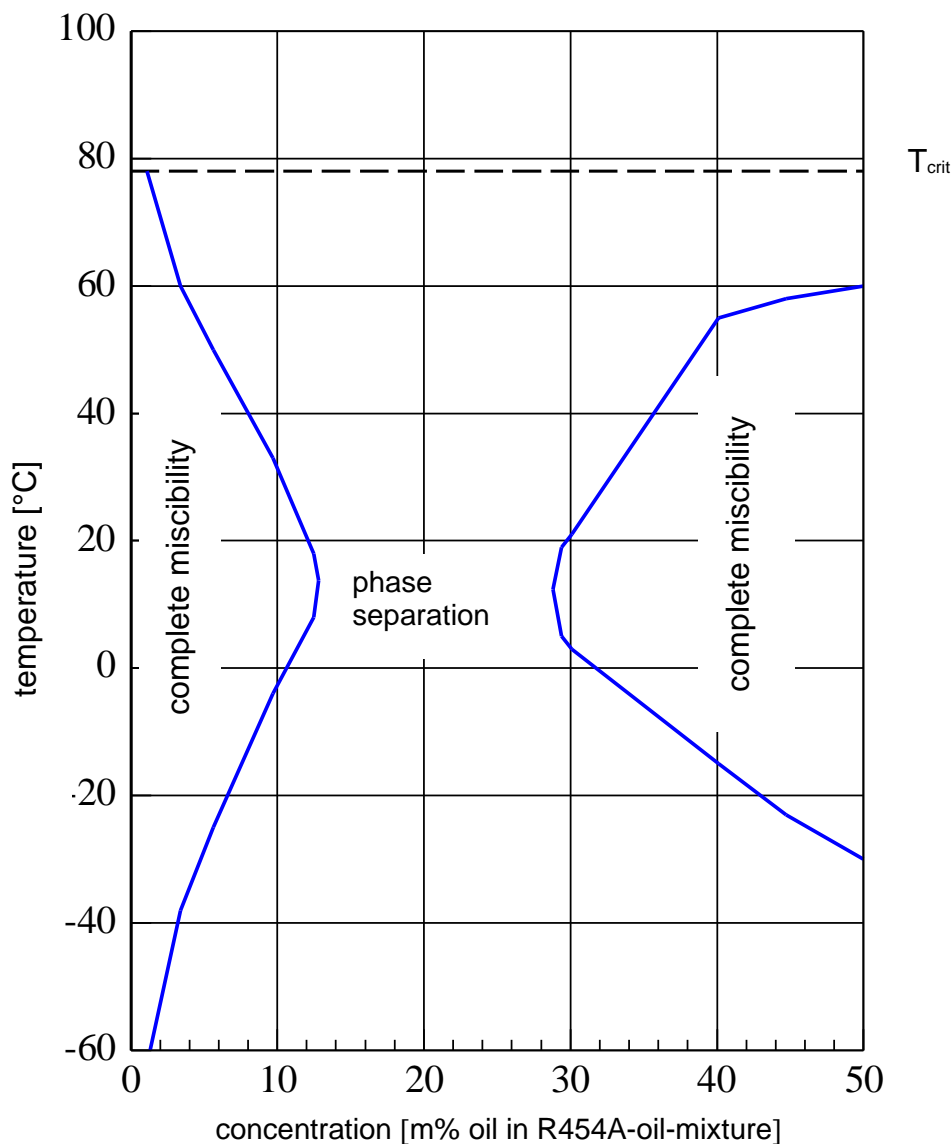


PI 4-1329, Page 33; PM 4 – 08.21

## RENISO TRITON SE 55

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

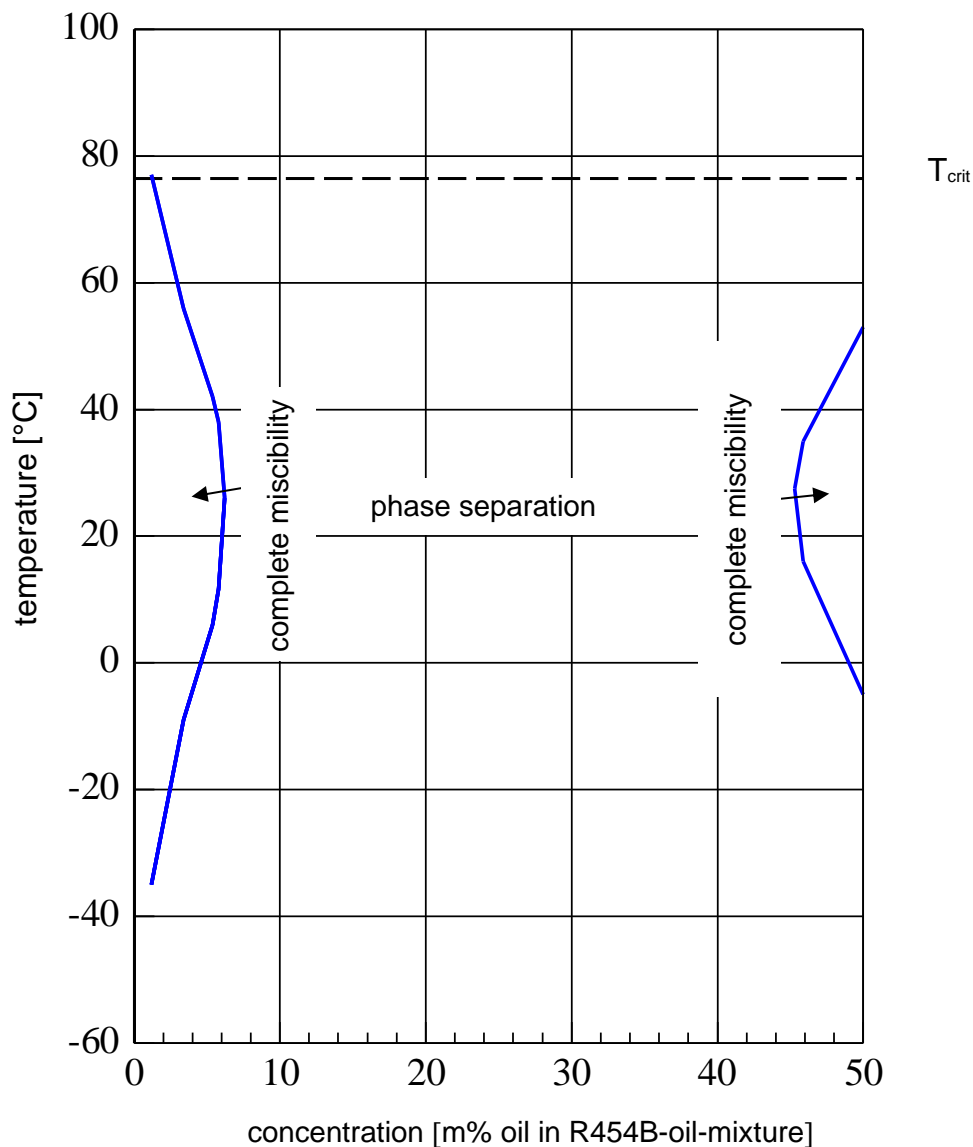
Miscibility behaviour (miscibility gap): RENISO TRITON SE 55 and R454A



## RENISO TRITON SE 55

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 55 and R454B

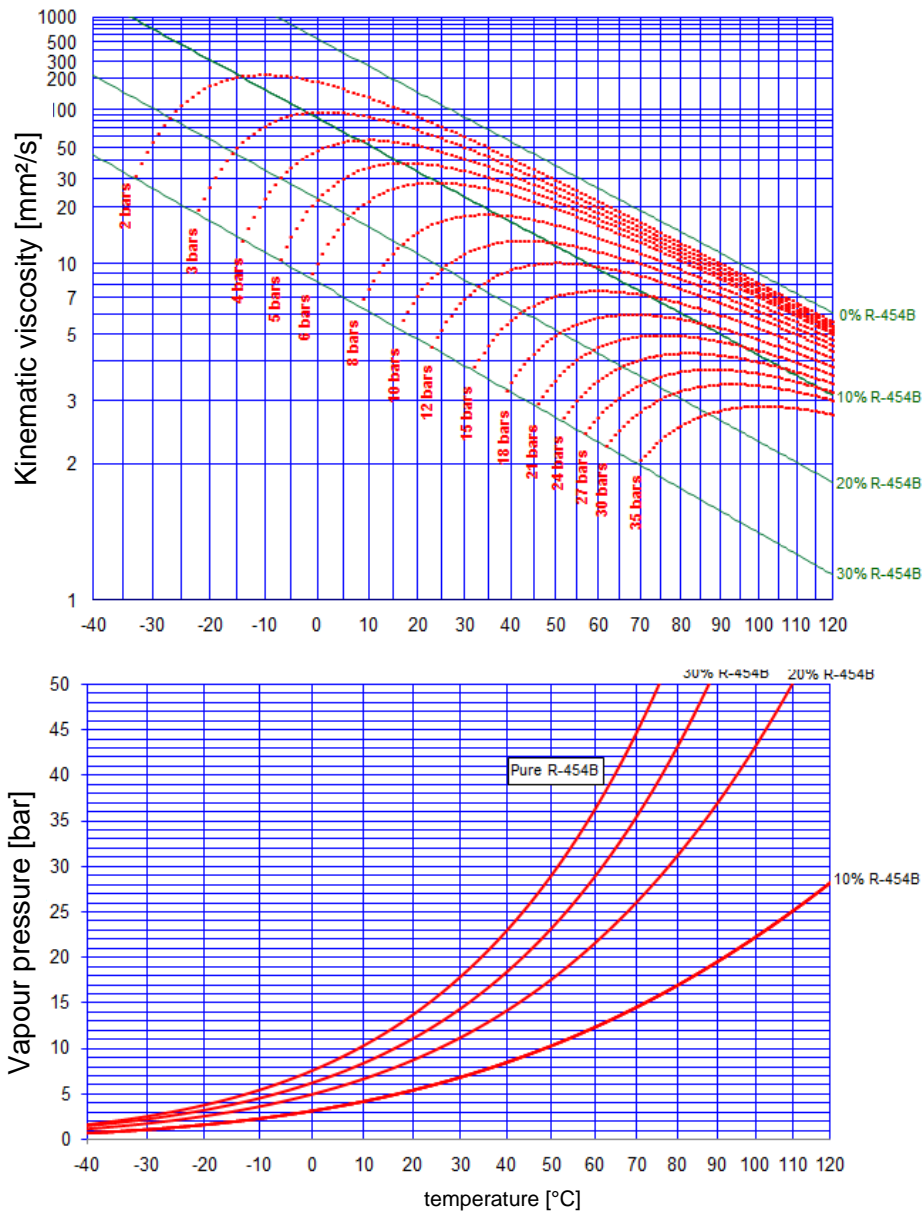


PI 4-1329, Page 35; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R454B



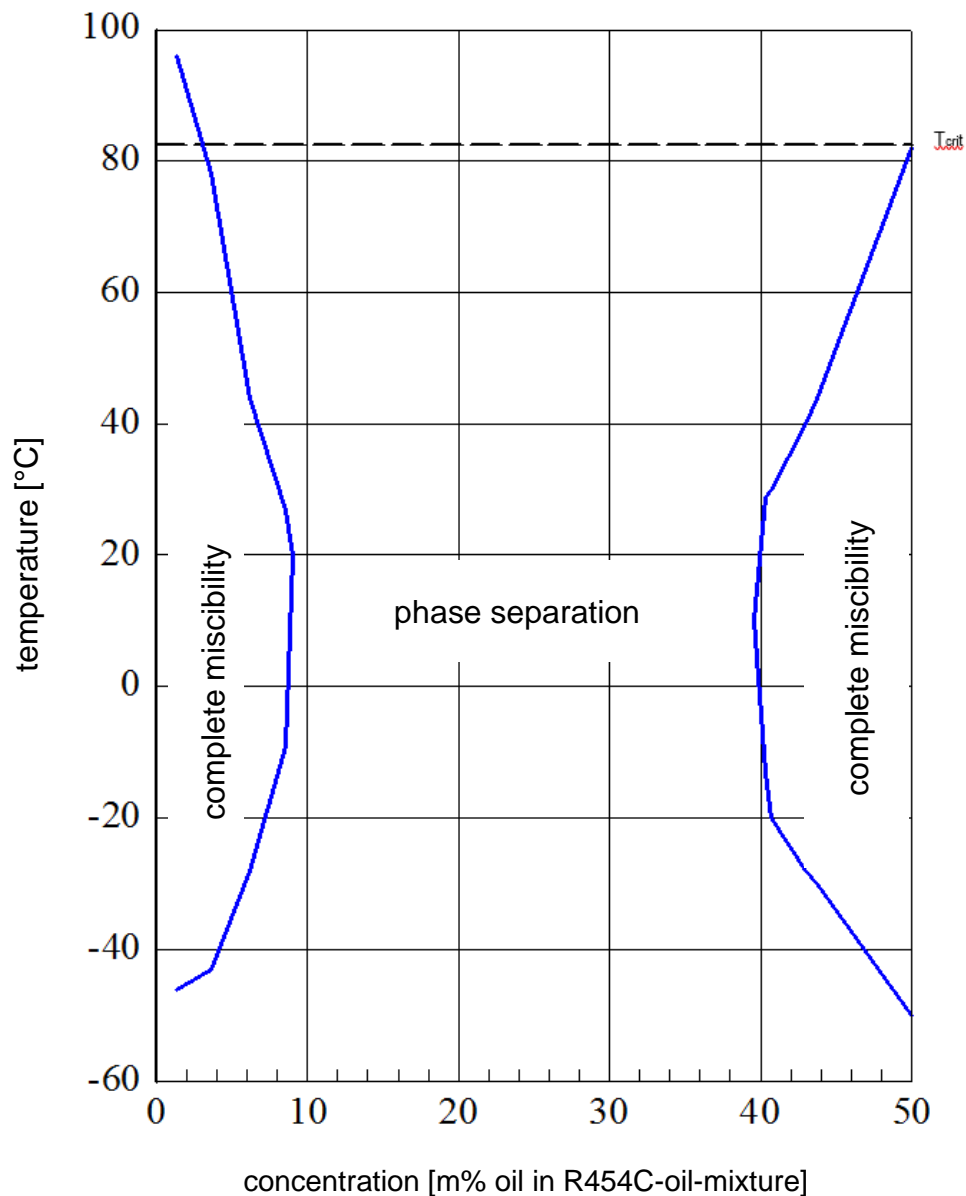
All % figures represent m% refrigerant in the refrigerant-oil-mixture.

PI 4-1329, Page 36; PM 4 – 08.21

## RENISO TRITON SE 55

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

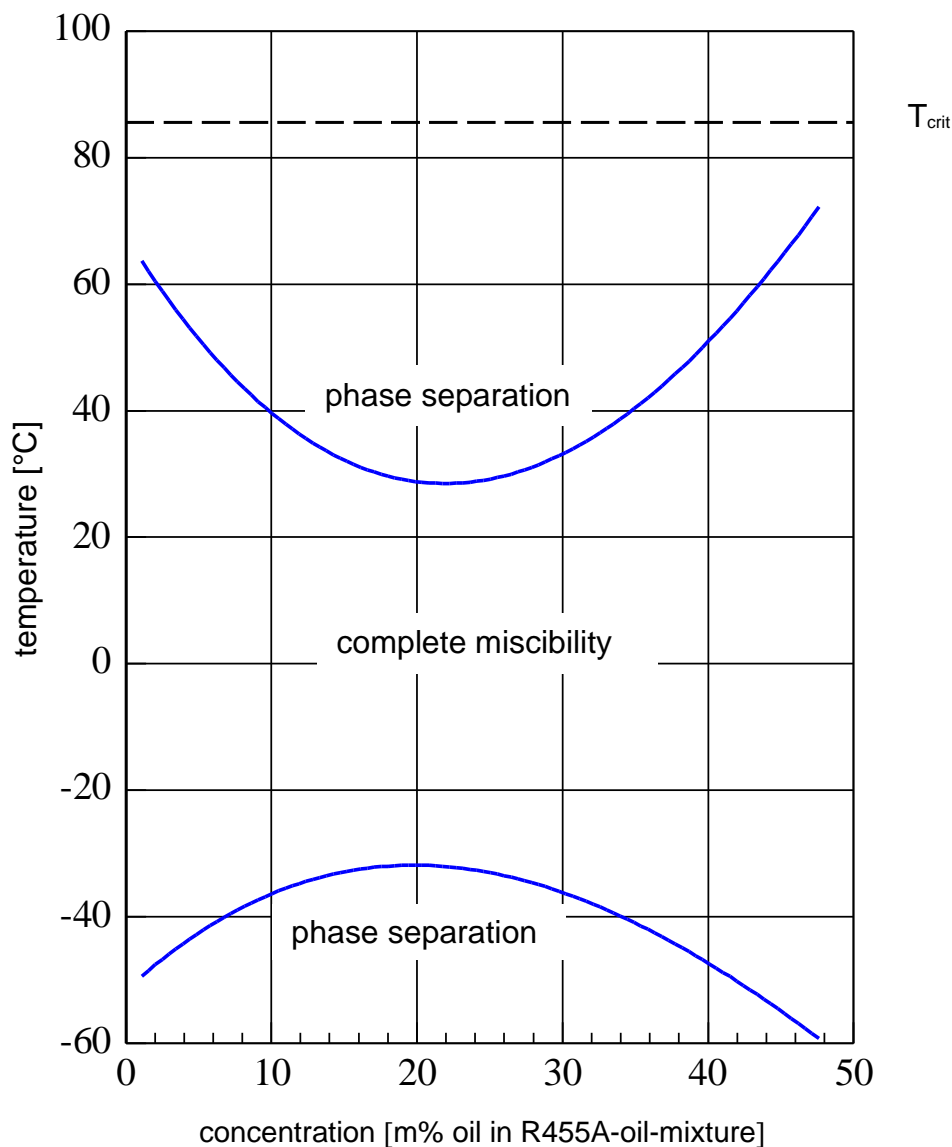
Miscibility behaviour (miscibility gap): RENISO TRITON SE 55 and R454C



## RENISO TRITON SE 55

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 55 and R455A

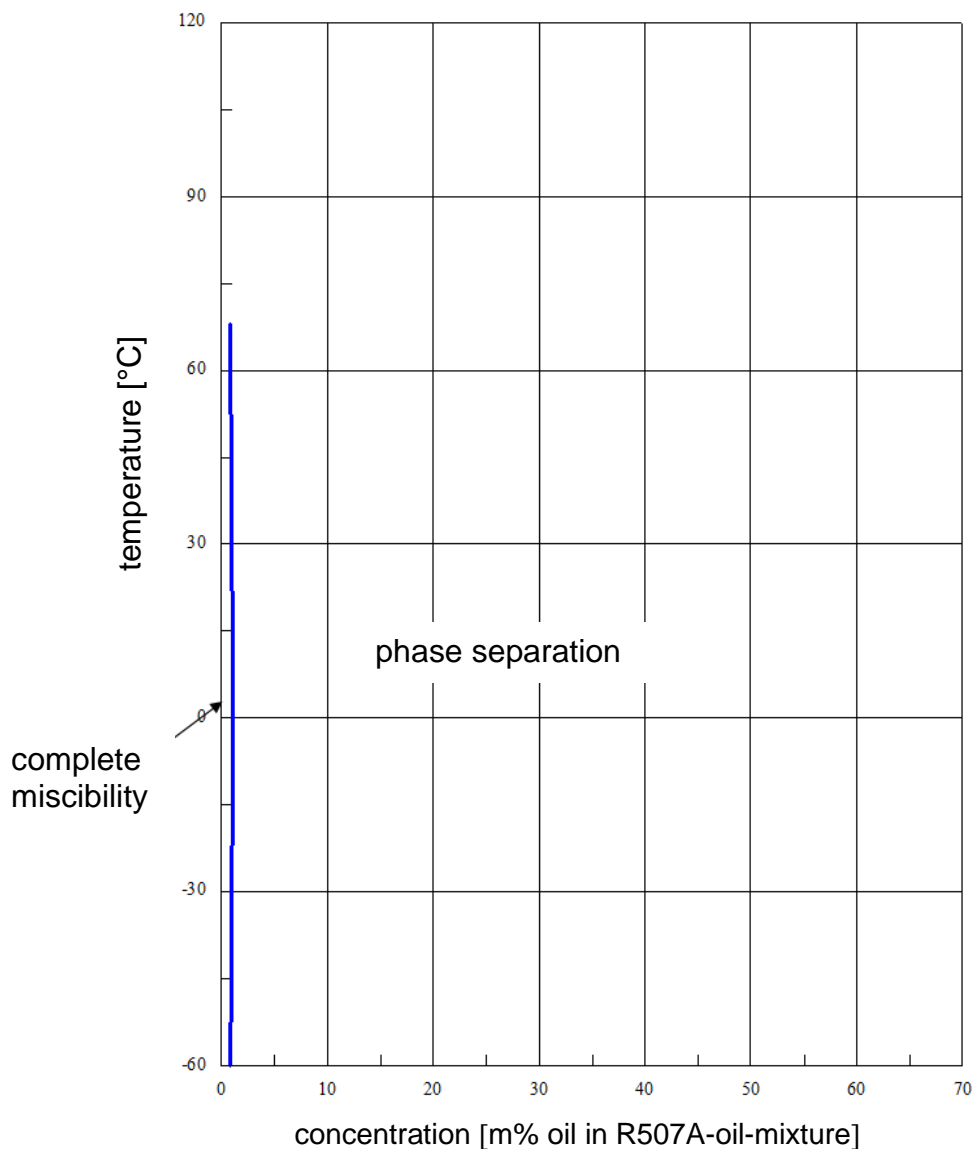


PI 4-1329, Page 38; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R507A

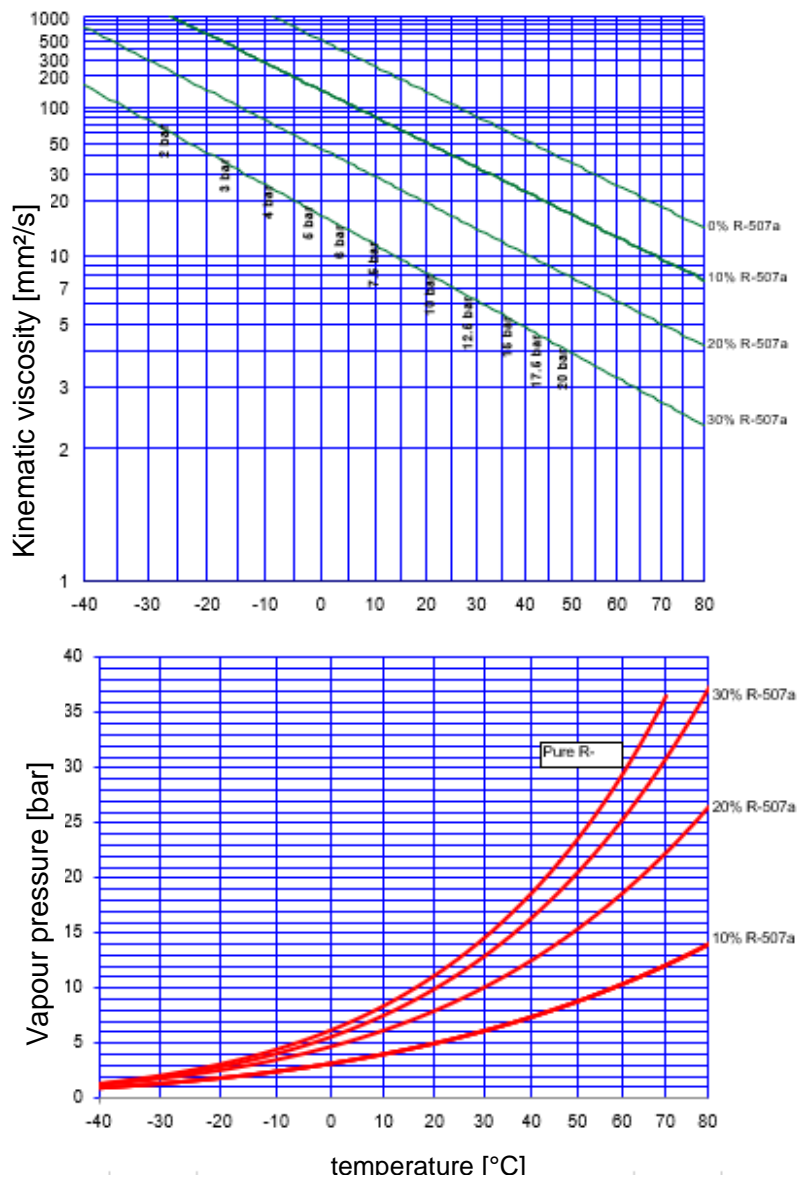


PI 4-1329, Page 39; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R507A



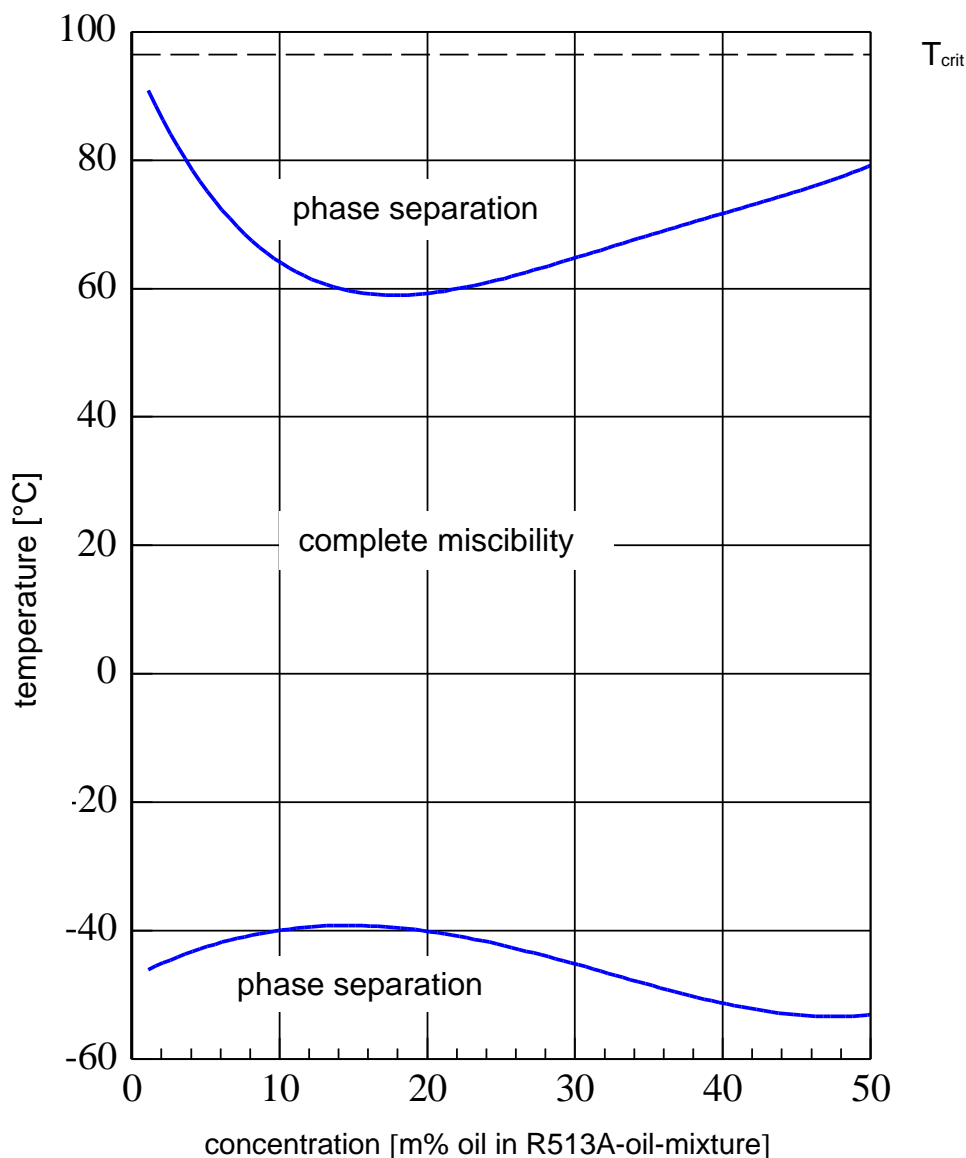
All % figures represent m% refrigerant in the refrigerant-oil-mixture.

PI 4-1329, Page 40; PM 4 – 08.21

## RENISO TRITON SE 55

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 55 and R513A

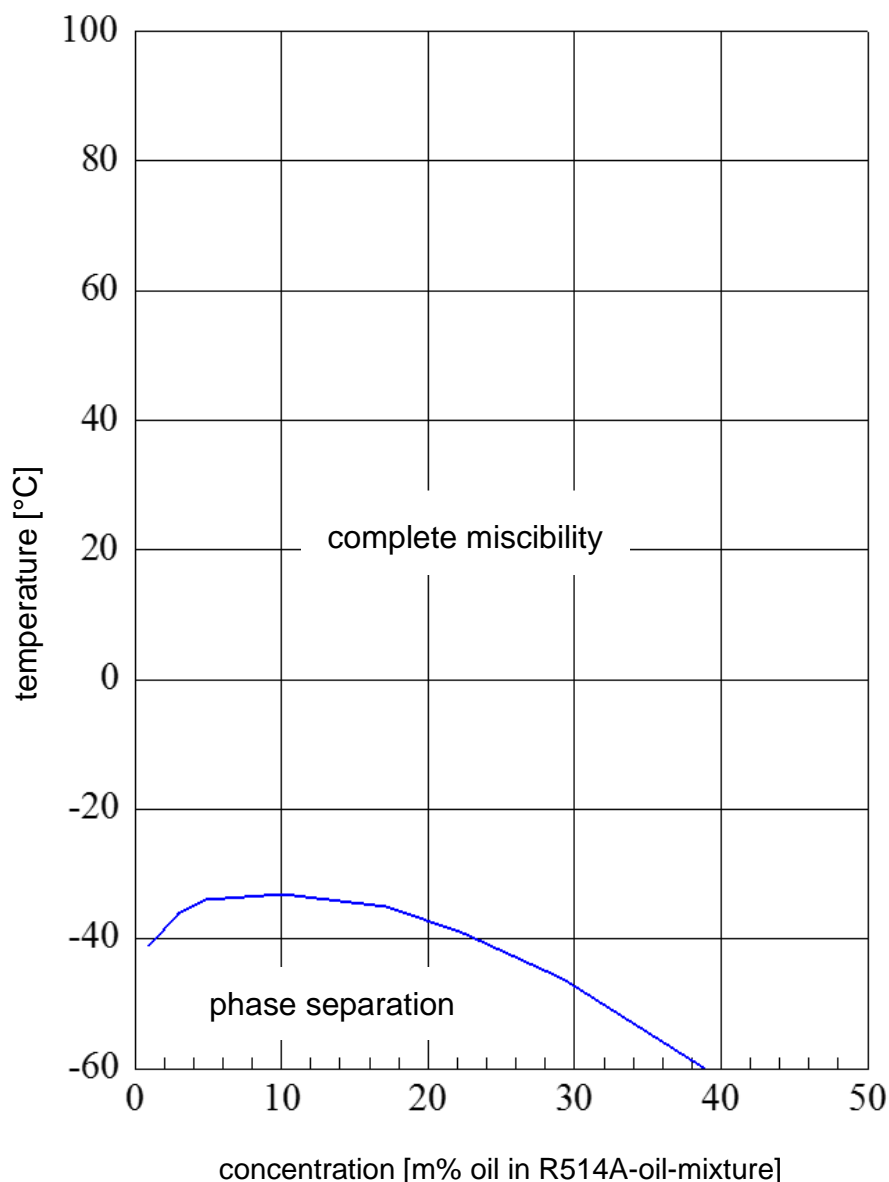


PI 4-1329, Page 41; PM 4 – 08.21

## RENISO TRITON SE 55

**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 55 and R514A



PI 4-1329, Page 42; PM 4 – 08.21

### Hinweis

Die Angaben in dieser Produktinformation beruhen auf den allgemeinen Erfahrungen und Kenntnissen der FUCHS LUBRICANTS GERMANY GmbH in der Entwicklung und Herstellung von Schmierstoffen und entsprechen unserem heutigen Wissensstand. Die Wirkungsweise unserer Produkte ist von vielfältigen Faktoren abhängig, insbesondere vom konkreten Einsatzzweck, der Applikation der Produkte, den Betriebsbedingungen, der Bauteilvorbehandlung, eventuellem Schmutzanfall von außen, etc. Aus diesem Grund sind allgemeingültige Aussagen zur Funktion unserer Produkte nicht möglich.

Unsere Produkte dürfen nicht in Flugzeugen oder Raumfahrzeugen verwendet werden. Zur Herstellung von Komponenten für Flugzeuge oder Raumfahrzeuge dürfen unsere Produkte verwendet werden, wenn sie vor der Montage in das Flugzeug oder Raumfahrzeug rückstandslos von den Komponenten entfernt werden.

Die Angaben in dieser Produktinformation stellen allgemeine, nicht verbindliche Richtwerte dar. Keinesfalls beinhalten sie hingegen eine Zusicherung von Eigenschaften oder eine Garantie für die Eignung des Produkts für den Einzelfall. Wir empfehlen daher, vor dem Einsatz unserer Produkte mit den Ansprechpartnern der FUCHS LUBRICANTS GERMANY GmbH ein individuelles Beratungsgespräch über die Einsatzbedingungen in der Anwendung und die Leistungsmerkmale der Produkte zu führen. Dem Anwender obliegt es, die Produkte in der vorgesehenen Anwendung auf deren Funktionssicherheit zu testen und mit der gebotenen Sorgfalt einzusetzen.

Unsere Produkte werden kontinuierlich weiterentwickelt. Deshalb behalten wir uns das Recht vor, das Produktprogramm, die Produkte und deren Herstellungsprozesse sowie alle Angaben in dieser Produktinformation jederzeit und ohne Vorankündigung zu ändern, sofern keine kundenspezifischen Vereinbarungen existieren, die dem entgegenstehen. Alle früheren Veröffentlichungen verlieren mit Erscheinen dieser Produktinformation ihre Gültigkeit. Vervielfältigungen jeder Art und Form bedürfen der vorherigen schriftlichen Genehmigung der FUCHS LUBRICANTS GERMANY GmbH.

© FUCHS LUBRICANTS GERMANY GmbH. Alle Rechte vorbehalten.