

## RENISO TRITON SE/SEZ

Fully synthetic refrigeration oils based on polyolesters for chlorine-free refrigerants, e.g. R134a, R404A

### Description

The refrigeration oils of the RENISO TRITON SE/SEZ series are based on synthetic esters that were especially developed for use with chlorine-free, fluorinated hydrocarbons (HFC/FC). In contrast to conventional refrigeration oils, these are miscible and compatible with polar HFC/FC.

### Application

The RENISO TRITON SE/SEZ series is outstandingly suited for all refrigeration circuits, in which chlorine-free HFC/FC refrigerants, e.g. R134a, R404A or R410A are used. Depending on the viscosity, RENISO TRITON SE/SEZ refrigeration oils are recommended for hermetical, semi-hermetical and open piston compressors and for screw-type and turbo-compressors. RENISO TRITON SEZ 22 is especially suitable for deep-freeze systems operating with R23.

### Note

Because of their chemical structure, ester-based oils tend to absorb water. For this reason, RENISO TRITON SE/SEZ should be in contact with ambient air only for a short time. When opened, the content must be filled immediately in the system. Remaining fluid must be used within one day.

### Advantages/Benefits

- Special synthetic polyolester
- Stable lubrication film even at high temperatures, outstanding lubricity
- Excellent solubility with HFC and FC refrigerants
- Very high thermal and chemical stability in the presence of fluorinated refrigerants
- Good viscosity-temperature behaviour
- 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
- Readily biodegradable (ISO VG 32 and ISO VG 55)
- Ultra-dried



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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



## CHARACTERISTICS: RENISO TRITON SE/SEZ

RENISO TRITON .....		SEZ 15	SEZ 22	SEZ 32	SE 55		
Characteristics	Unit					Test Method	
Density at 15°C	kg/m <sup>3</sup>	1023	1001	1004	1009	DIN 51 757	
Flash point	°C	235	228	250	286	DIN ISO 2592	
Colour	-	0.5	0.5	1.0	1.0	DIN ISO 2049	
Kinematic viscosity	at 40°C	mm <sup>2</sup> /s	15.9	20	32	55	DIN EN ISO 3104
	at 100°C	mm <sup>2</sup> /s	3.6	4.4	6.1	8.8	
Viscosity index	-	115	134	140	137	DIN ISO 2909	
Pour point	°C	-60	-57	-57	-48	DIN ISO 3016	
Neutralisation number	mgKOH/g	0.03	0.03	0.03	0.03	DIN 51 558	
Water content	mg/kg	< 50	< 50	< 50	< 50	DIN 51 777-1	

RENISO TRITON .....		SEZ 68	SEZ 80	SEZ 100	SE 170	SE 220	
Characteristics	Unit						Test Method
Density at 15°C	kg/m <sup>3</sup>	970	992	970	972	976	DIN 51 757
Flash point	°C	258	251	266	260	285	DIN ISO 2592
Colour	-	0.5	0.5	1.0	1.0	0.5	DIN ISO 2049
Kinematic viscosity	at 40°C	mm <sup>2</sup> /s	68	82	100	173	DIN EN ISO 3104
	at 100°C	mm <sup>2</sup> /s	8.8	10.4	11.4	17.6	
Viscosity index	-	125	115	100	111	105	DIN ISO 2909
Pour point	°C	-39	-39	-30	-27	-27	DIN ISO 3016
Neutralisation number	mgKOH/g	0.03	0.03	0.03	0.03	0.03	DIN 51 558
Water content	mg/kg	< 50	< 50	< 50	< 50	< 50	DIN 51 777-1



## Recommendations:

Compressors Units	SEZ 15	SEZ 22	SEZ 32	SE 55	SEZ 68	SEZ 80	SEZ 100	SE 170	SE 220
<b>R 134a</b>									
Refrigerators	1	1	2	4	4	4	4	4	4
Household refrigerators	2	1	1	3	4	4	4	4	4
Semi-hermetic and hermetic compressors	4	2	1	2	2	3	3	4	4
Open compressors	4	3	1	1	1	2	2	4	4
Screw compressors	4	3	3	3	3	3	2	1	1
Turbocompressors	4	4	4	1	1	2	2	4	4
A/C systems for passenger vehicles	4	4	4	1	1	2	2	4	4
<b>R 23</b>									
Piston and screw-type compressors	2	1	1	4	4	4	4	4	4

Rating: 1 very good    4 not recommended