

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 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**



PI 4-1255, Page 1 - PM 4 / 08.04

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Typical technical data:

Product name		SEZ 15	SEZ 22	SEZ 32	SE 55	
Properties	Unit					Test method
Density at 15°C	kg/m ³	1023	998	1007	1009	DIN 51 757
Flash point	°C	210	240	240	270	DIN ISO 2592
Color	-	0.5	0.5	1.0	1.0	DIN ISO 2049
Kinematic viscosity at 40 °C	mm ² /s	15.6	19	32	55	DIN 51 562-1
at 100 °C	mm ² /s	3.6	4.2	6.1	9.0	
Viscosity index	-	112	130	141	143	DIN ISO 2909
Pour point	°C	-54	-54	-48	-51	DIN ISO 3016
Neutralization number	mgKOH/g	0.03	0.03	0.03	0.03	DIN 51 558-3
Water content	mg/kg	< 50	< 50	< 50	< 50	DIN 51 777-1

PI 4-1255, Page 2 - PM 4 / 08.04

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for chlorine-free refrigerants, e.g. R134a, R404A

Typical technical data:

Product name		SEZ 68	SEZ 80	SEZ 100	SE 170	SE 220	
Properties	Unit						Test method
Density at 15°C	kg/m ³	1011	1004	995	972	980	DIN 51 757
Flash point	°C	258	275	288	260	285	DIN ISO 2592
Color	-	0.5	0.5	1.0	1.0	0.5	DIN ISO 2049
Kinematic viscosity at 40 °C	mm ² /s	65.6	82	100	173	235	DIN 51 562-1
at 100 °C	mm ² /s	9.5	10.3	11.8	17.6	20.7	
Viscosity index	-	125	108	107	111	103	DIN ISO 2909
Pour point	°C	-45	-39	-39	-24	-27	DIN ISO 3016
Neutralization number	mgKOH/g	0.03	0.03	0.03	0.03	0.01	DIN 51 558-3
Water content	mg/kg	< 50	< 50	< 50	< 50	< 50	DIN 51 777-1

PI 4-1255, Page 3 - PM 4 / 08.04

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Recommendations:

Compressor Units	SEZ 15	SEZ 22	SEZ 32	SE 55	SEZ 68	SEZ 80	SEZ 100	SE 170	SE 220
R134a									
Refrigerators	1	1	2	4	4	4	4	4	4
Household refrigerators	2	1	1	3	4	4	4	4	4
Semi-hermetical and hermetical 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 pass. vehicles	4	4	4	1	1	2	2	4	4
R23									
Piston and screw-type compressors	2	1	1	4	4	4	4	4	4

Rating: 1 very good 4 not recommended