

RENISO C REFRIGERATION OILS

Refrigeration oils for CO₂ compressors

Description

The products of the RENISO C Series are refrigeration oils based on special synthetic esters. Highly effective additives ensure optimum wear protection even under unfavourable operating conditions. The RENISO C oils are characterised by excellent miscibility with the refrigerant CO₂ (R744).

Application

The RENISO C refrigeration oils were specifically developed for use in refrigeration systems that are run on carbon dioxide refrigerant. Due to their favourable miscibility properties, sufficient oil reflux is ensured at low evaporation temperatures in particular. The areas of application are in practically all fields of industrial and commercial refrigeration, e.g. walk-in freezer units and aggregate cooling systems. RENISO C 85 E and C 120 E are also suitable for use in transcritical operated CO₂ circuits (e.g. climate control and heat pump systems as well as container refrigeration units). RENISO C 170 E was specifically developed for use in screw compressors.

Advantages/Benefits

- High thermal stability
- High chemical stability with CO₂ refrigerant
- Excellent deep-temperature flowability
- Very good lubrication at high pressure levels under CO₂ atmosphere
- Proven effective in a wide variety of trial and prototype systems
- Used by leading compressor manufacturers

Approvals:

- BITZER Kühlmaschinenbau
- BOCK Kältemaschinen
- JOHNSON CONTROLS
- GEA GRASSO Industrial Refrigeration



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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.

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CHARACTERISTICS: RENISO C REFRIGERATION OILS

Product Name		C 55 E	C 85 E	C 120 E	C 170 E	
Characteristics	Unit					Test Method
Colour		1	0.5	0.5	0.5	DIN ISO 2049
Density at 15°C	kg/m ³	1009	993	996	976	DIN 51 757
Flashpoint	°C	286	246	246	286	DIN ISO 2592
Kinematic viscosity						DIN 51 562-1
at 40°C	mm ² /s	55	80	120	178	
at 100°C	mm ² /s	8.8	10.6	12.4	18.5	
Viscosity index	-	137	118	94	116	DIN ISO 2909
Pour point	°C	-48	-42	-36	-36	DIN ISO 3016
Neutralisation number	mg KOH/g	0.03	0.02	0.02	0.03	DIN 51 558-3
Water content	mg/kg	< 30	< 30	< 30	< 30	DIN 51 777-2

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