

RENISO K Special naphthenic refrigeration oils

Description

RENISO K refrigeration oils are highly refined, naphthenic selective raffinates that have been dewaxed especially for use at low temperatures. Their degree of refinement ensures that the RENISO K oils are extremely resistant to ageing when combined with any conventional refrigerant especially with ammonia (NH₃) and with HCFC(CFC).

Application

RENISO KM 32, KS 46, KC 68 is recommended for use with ammonia (R717) and CFC/HCFC systems in open, semi-hermetic and hermetic compressors. RENISO KES 100 is recommended for use in CFC / HCFC systems, especially when high evaporation and condensation temperatures can occur, as e.g. in bus and vehicle air conditioning systems.

Specifications

RENISO K products are refrigeration oils according to DIN 51 503, KAA * and KC **:

KAA – NH₃ refrigeration oils

KC – CFC / HCFC refrigeration oils

* KAA = not miscible with ammonia (R 717)

** KC = miscible with fluorochlorinated hydrocarbons
- CFC / HCFC (German: FCKW / HFCKW)

Advantages/ Benefits

- **Good solubility with fluorochlorinated hydrocarbons (CFC / HCFC)**
- **High chemical and thermal stability with ammonia (NH₃)**
- **Excellent flowability at low temperatures ensures continuous heat transfer and enhanced system efficiency**
- **Prevent breakdowns due to formation of wax deposits at low temperatures**
- **Very low water content – dried before packaging**





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Typical data:

Product name		KM 32	KS 46	KC 68	KES 100	
Characteristics	Unit					Test method
Colour		1.0	1.0	1.0	1.5	DIN ISO 2049
Density at 15 °C	kg/m ³	891	895	900	904	DIN 51 757
Flash point, Cleveland open cup	°C	185	195	200	220	DIN ISO 2592
Kinematic viscosity at 40 °C	mm ² /s	32	46	68	100	DIN 51 550 with
at 100°C	mm ² /s	4.8	5.8	7.2	8.8	DIN 51 562-1
Viscosity index		47	47	45	41	DIN ISO 2909
Pour point	°C	-45	-42	-39	-33	DIN ISO 3016
U-tube flowing	°C	-35	-30	-25	-18	DIN 51 568
Floc point (R 12)	°C	-50	-50	-50	-52	DIN 51 351
Neutralization number / total acid number	mgKOH/g	0.01	0.01	0.01	0.01	DIN 51 558-3
Refrigerant stability (R 12)	h	> 96	> 96	> 96	> 96	DIN 51 593
Water content (K.F.)	mg/kg	25	25	25	25	DIN 51 777-1 or DIN 51 777-2
Electrical conductivity	KV	> 40	> 40	> 40	> 40	DIN VDE 0370-1

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The above information is supplied to the best of our knowledge and belief on the basis of the current state-of-the-art and our own development work. Subject to amendment.