



Gulf Eskimo

High Performance Naphthenic Refrigeration Compressor oil

Product Description

Gulf Eskimo series are high performance naphthenic refrigeration compressor oils specially designed to meet the stringent requirements of major refrigeration compressor manufacturers. These oils are formulated with severely hydro treated naphthenic base oils to provide excellent protection against oxidation degradation, rust & corrosion and foaming & entrained air. These oils are specifically designed for refrigeration systems using non-hydrofluorocarbon refrigerants such as R-11, R-12, R-13B1 R-22, R-113, R-500, R-501, R-502, R-717 (Ammonia - NH₃), etc. These oils exceed the performance requirements of DIN 51503 KAA, KC and KE and ISO 6743-3:2003 L-DRA, L-DRE and L-DRG.

Features & Benefits

- Good thermo-oxidative stability controls deposits in evaporator tubes, improves heat transfer and improves oil life resulting in improved equipment reliability, availability and efficiency.
- Free from additives and pour point depressants as these have been known to impair the performance of some refrigeration systems
- Low pour point and floc point ensures smooth operation at low operating temperatures
- Low ash and carbon forming tendency ensures improved valve performance and reduced potential for fires and explosions in the discharge systems.
- Good wear and rust protection results in reduced maintenance costs and longer equipment life.
- Compatible with materials used in the entire refrigeration system.

Applications

- Large Industrial reciprocating and rotary refrigeration compressors.
- Suitable for use with most non-hydrofluorocarbon refrigerant gases like R-11, R-12, R-13B1 R-22, R-113, R-500, R-501, R-502, R-717 (Ammonia - NH₃), CO₂, etc compressors of Carrier, Copeland, Kelvinator, Sabroe, Tecumseh make among others where such quality oils are recommended.
- Marine refrigeration applications like food freezing and cold storage plants
- Also used in circulating oil systems, plain and rolling element bearings, etc
- **NOTE** : These oils are NOT recommended for use with HFC refrigerants such as R-134a.

Specifications, Approvals & Typical Properties

ISO Viscosity grades	32	46	68	100	
Specification					
DIN 51503 KAA, KC and KE	X	X	X	X	
ISO 6743-3:2003 L-DRA, L-DRE and L-DRG	X	X	X	X	
Typical Properties					
Test Parameters	ASTM Method	Typical Values			
Viscosity @ 40 °C, cSt	D 445	32.1	45.9	68.9	100.5
Flash Point, °C	D 92	184	188	206	218
Pour Point, °C	D 97	-442	-39	-36	-30
Density @ 15°C, Kg/l	D 1298	0.915	0.921	0.921	0.917
Conradson Carbon Residue (CCR), %m	D 189	< 0.01	< 0.01	< 0.01	<0.01
Rust Test	D 665 A/B	Pass	Pass	Pass	Pass
Copper Corrosion, 1hr @ 100°C	D 130	1a	1a	1a	1a
Total Acid Number, mg KOH/g	D 974	0.01	0.01	0.01	0.01
Flocculation Point, R-12	DIN 51351	-40	-36	-31	-17
Saponification No. mg KOH/gm	D 94	0.05	0.05	0.05	0.05

February 2009

Properties mentioned above are typical only and minor variations, which do not affect the product performances, are to be expected in normal manufacturing. The above information is based on past history of the grade only and must not be construed as a guarantee of performance. Follow equipment manufacturer's recommendations for performance level and viscosity grade. The Material Safety Data Sheet for this product is available from your nearest Gulf Distributor.

Gulf Oil International

The information contained herein is believed to be correct at time of publication. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products. Gulf Oil International reserves the right to modify and change its products and specifications without prior notice.

www.gulfoilltd.com