

## PRODUCT DATA

### GulfSea N Cooloil

*High Performance Naphthenic Refrigeration Compressor Oil*

#### Product Description

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**GulfSea N Cooloil** 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 - NH<sub>3</sub>), 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

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- Excellent 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
- Good wear and rust protection results in reduced maintenance costs and longer equipment life.
- Compatible with materials used in the entire refrigeration system.

#### Applications

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- Large Industrial reciprocating and rotary refrigeration compressors.
- Marine refrigeration applications line food freezing and cold storage plants
- 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 - NH<sub>3</sub>), etc compressors of Carrier, Copeland, Kelvinator, Sabroe, Tecumseh make among others where such quality oils are recommended.
- 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.

# PRODUCT DATA

## Typical Properties

GulfSea N Cooloil Series					
		<b>32</b>	<b>46</b>	<b>55</b>	<b>68</b>
ISO Viscosity grades		32	46	-	68
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
Typical Properties					
Test Parameters	ASTM Method	Test Values			
Viscosity @ 40 °C, cSt	D 445	32.1	46.2	55	68.3
Flash Point, °C	D 92	182	188	179	200
Pour Point, °C	D 97	-44	-39	-36	-36
Density @ 15°C, Kg/l	D 1298	0.907	0.91	0.916	0.913
Total Acid Number, mg KOH/g	D 974	0.01	0.01	0.01	0.01
Flocculation Point, R-12	DIN 51351	-40	-36	-48	-31
Aniline Point,	D 611	77.6	80	77	83

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