

PRODUCT DATA SHEET



Athen Marine REF Syn POE Oil Series

High Performance Fully Synthetic Refrigeration Compressor Oil

Product Description

Athen Marine REF Syn POE Series are high-performance, fully synthetic lubricants specifically designed for the lubrication of refrigeration compressors and systems using ozone-friendly synthetic HFC refrigerants as well as recently developed HFO refrigerants and HFO/HFC blends with lower Global Warming Potential than HFCs, including A1 and A2L refrigerants as per ASHRAE 34/ISO 817 safety classification. These series are recommended for use in HVAC (Heating, Ventilation, Air Conditioning) and commercial and Industrial Refrigeration.

Features & Benefits

- Excellent thermo-oxidative stability
- This very good solubility, particularly with R-134a, R23, and comparable refrigerants as well as blends of those refrigerants over a wide range of operating temperatures. Also compatible with HFC-type refrigeration gases
- This Excellent wear, rust protection, and compatibility with elastomers are commonly used in the refrigeration system.

Applications

- Mobile air conditioning, domestic refrigeration, residential and commercial air conditioning and heat pump, commercial refrigeration including transport refrigeration, Industrial refrigeration (reciprocating and rotary units) using HFC refrigerants.
- These Marine refrigeration applications line food freezing and cold storage plants
- Suitable for use with most hydrofluorocarbon refrigerant gases like R-134a, R-23, R-125, R-143a, R-152a, R-404A, R-407A, R-407C, R-408A, R-410A, R-507A etc. compressors where such quality oils are recommended.
- **These series must not be used in ammonia systems (NH3 / R-717)**

Athen Marine REF Syn POE Series							
Typical Characteristics	SAE Grade	32	46	68	100	150	220
Test Parameters	ASTM Method	Typical					
Density @ 15°C, kg/l	D 1298	Report	Report	Report	Report	Report	Report
Viscosity @ 40°C, cSt	D 445	32	46	68	100	150	220
Viscosity @ 100°C, cSt	D 445	5.6	6.9	8.3	10.6	14.2	18.05
Viscosity Index	D 2270	115	104	96	93	91	89
Flash Point, °C	D 92	250	250	260	270	270	270
Pour Point, °C	D 97	-52	-45	-42	-33	-33	-30

"Data provided in this PDS is based on standard tests under laboratory conditions and is indicative only. Minor variations that do not affect product performance are expected in normal manufacturing. This product should not be used for any purpose other than those expressly set out in this PDS.