

PRODUCT DATA SHEET



Athen Marine Turbine Series

A turbine oil for geared and non-geared turbines

Product Description

The Athen Marine Turbine Oil series is a turbine oil developed for gas, steam, and expansion turbines and turbo compressors with and without gearboxes based on the latest lubrication technology. The excellent properties of the base oils produced in a special process are enhanced using a carefully selected additive system. These oils contain no organometallic compounds and are, therefore, ashless. They provide zinc-free wear protection.

Features & Benefits

- High thermal stability, good viscosity-temperature behavior, Rapid air release, no foaming, Low pour point, good wear protection, and Excellent corrosion protection
- Effective rust and corrosion inhibitors provide long-term protection to critical system components
- Excellent water separation capability resists the formation of emulsion and leads to easy removal of excess water from the lubrication system

Applications

- It is recommended primarily for use in marine turbines of all types. These include steam, hydraulic, and gas turbines.
- It also provides good performance in hydraulic machinery, circulating oil systems, all applications where high-quality, stable lubricants with good water-separating characteristics is required, and non-heavy-duty hydraulic systems where OEM recommends R&O type oils
- Power generation gas turbines, Combined cycle gas turbines (CCGT), Large heavy-duty industrial gas turbines, Power generation and industrial steam turbines, Turbines with heavily loaded gears, and Turbo compressors

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Athen Marine Turbine Series					
ISO Viscosity Grades		32	46	68	100
Performance Level Meets/Exceeds the specifications					
ASTM D 4304, Type I(non-EP) and Type II (EP)		✓	✓	✓	✓
BS 489		✓	✓	✓	✓
DIN 51515 Part 1 (TD) and Part 2 (TG)		✓	✓		
ISO 8086 TSE, TGE, TSA and TGA		✓	✓		
Alstom HTGD 90117 V 0001T		✓	✓	✓	
GEK 32568E/F		✓			
GEK 46506D		✓			
GEK 28143A		✓	✓		
GEK 107395a		✓			
GEK 101941A		✓			
Siemens TLV 9013-04		✓	✓		
Typical Properties					
Test Parameters	ASTM Method	Typical			
Viscosity @ 40 °C, cSt	D 445	32	46	68	100
Viscosity Index	D 2270	100	100	100	98
Flash Point, °C	D 92	210	220	230	240
Pour Point, °C	D 97	-21	-21	-15	-15
Density @ 15°C, Kg/l	D 1298	0.852	0.855	0.858	0.862
Rust Test	D 665A/B	Pass	Pass	Pass	Pass
Copper Corrosion	D 130	1b	1b	1b	1b
Acid Number, mg KOH/g	D 974	0.1	0.1	0.1	0.1
Water separability, minutes to 3 ml emulsion @ 54 °C & 82 °C	D 1401	Pass	Pass	Pass	Pass
Foam Test, foam after 10 minutes of settling for all sequences	D 892	Nil	Nil	Nil	Nil
FZG, fail load stage	DIN 51324	10	10	10	10
Air Release, minutes	D 3427	3	4	5	6

"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.