

PetroNexus Orion S3 EP Marine Turbine Oil

Product reference: CBY-07

Marine turbine oil for circulating lubrication in turbine systems.

PetroNexus Orion S3 EP Marine Turbine Oil

Product name

PetroNexus Orion S3 EP Marine Turbine Oil

Viscosity / grade

32, 46, 68, 100

Standard references

ASTM D 4304, Type I (non-EP) and Type II (EP)

BS 489

D IN 51515 Part 1 (TD) and Part 2 (TG)

ISO 8086 TSE, TGE, TSA and TGA

Alstom HTGD 90117 V 0001T

GEK 32568E/F

GEK 47006e

GEK 28143A

GEK 107395a

GEK 101941A

Siemens TLV 901304

Solar ES 9-224, Class II

Siemens TLV 901304, Alstom HTGD 90117

Siemens TLV 901304 and 901305 (for use in Siemens turbosets with and without gearbox)

Product overview

PetroNexus Orion S3 EP is a high-performance turbine oil series designed for geared and non-geared steam turbines, gas turbines and combined-cycle gas turbines (CCGT), including gas turbines operating at high temperatures. It is formulated from high-quality, deeply hydrotreated base oils and proprietary ashless additive technology, incorporating antioxidants, FZG performance enhancers, corrosion inhibitors and metal deactivators. Its excellent thermal and oxidation stability, good load-carrying capacity, outstanding water separation, excellent rust and corrosion protection, low foaming tendency, good air release and resistance to chemical degradation provide excellent equipment protection, reliable operation, reduced downtime and extended service life.

Performance features

1. Excellent thermal and oxidation stability prevents sludge formation, controls deposits and minimizes oil degradation to support reliable operation.
2. Outstanding antiwear performance and load-carrying capacity provide excellent protection for geared turbines.

3. Excellent water separation prevents emulsion formation and helps remove excess water from the lubrication system.
4. Effective rust and corrosion inhibitors provide long-term protection for critical system components.
5. Good air release and foam control help prevent unstable operation and cavitation, supporting trouble-free service.

Applications

- Gas turbines used in steam generation.
- Large, heavy-duty industrial gas turbines.
- Steam turbines for power generation and industrial service.
- Turbines with heavily loaded gearing.
- Turbocompressors.

Packaging

170 kg drums; IBC containers

For grade selection, technical requirements, packaging and commercial terms, contact sales@petronexusgroup.com.

Product visual and technical data



PETRONEXUS

Aolian S3 EP

High-Performance Marine Turbine Oil

Reliable Lubrication for Demanding Operations

Turbine Reliability
Drives a More Efficient Tomorrow



KEY PERFORMANCE

-  Excellent Thermal and Oxidation Stability
-  Outstanding Anti-Wear Protection and Load-Carrying Capacity
-  Superior Demulsibility and Water Separation Performance
-  Effective Rust and Corrosion Protection
-  Good Air Release and Foam Control Properties

PRODUCT DESCRIPTION

Aolian S3 EP is a high-performance turbine lubricating oil formulated with premium severely hydrotreated base oils and proprietary ashless additive technology. It provides excellent thermal and oxidation stability, reliable load-carrying capacity, outstanding water separation performance, and superior rust and corrosion protection.

Designed for geared and non-geared steam turbines, gas turbines, and combined-cycle gas turbine (CCGT) systems, it helps maintain stable lubrication performance, reduce unplanned downtime, and extend equipment service life.

APPLICATIONS

-  **Steam and Gas Turbine Power Generation**
For compatible steam and gas turbine systems.
-  **Combined-Cycle Gas Turbine (CCGT) Systems**
For CCGT power generation systems.
-  **Heavy-Duty Industrial Gas Turbines**
For large industrial gas turbines.
-  **Power Generation and Industrial Steam Turbines**
For power plants and industrial applications.
-  **Turbines with Heavily Loaded Gear Drives**
For geared turbine systems with high loads.
-  **Turbocompressor Systems**
For compatible turbocompressors.



CLEAN OPERATION LONGER SERVICE LIFE

PROTECTING YOUR EQUIPMENT
IN EVERY OPERATION



STABLE PERFORMANCE IN DEMANDING CONDITIONS

HIGH-QUALITY BASE OILS
RELIABLE PROTECTION

TYPICAL DATA

ISO Grade		32	46	68	100
Test Item	Test Method	Typical Data			
Kinematic Viscosity @ 40°C, cSt	ASTM D445	32.6	46.3	68.2	100.5
Viscosity Index	ASTM D2270	105	104	104	98
Flash Point, °C	ASTM D92	212	220	222	224
Pour Point, °C	ASTM D97	-24	-21	-15	-15
Density @20°C, kg/l	ASTM D1298	0.852	0.855	0.858	0.862
Turbine Oil Stability Test (TOST), hours	ASTM D943	10,000+	10,000+	10,000+	-
Oxidation Stability Test, minutes	ASTM D2272	1000+	1000+	1000+	1000+

The above data are typical values for the current products. Data for each batch may vary within the allowable range of Speed Quality Standards. For further data, please contact your sales representative.

PACKAGING

170 kg Drums / IBC Containers



-  Reliable Supply
-  Professional Packaging
-  Global Service