ATURBRIO EP

Heavy Duty Turbine Oil for Geared Turbines

Product Description:

Veedol Aturbrio EP are high performance turbine oils meant for lubrication of geared and non-geared steam, gas, and hydropower turbines.

These oils are manufactured from highly refined, hydro treated base oils and ashless anti-wear additives with outstanding oxidation stability and corrosion protection along with foam inhibiting additives. Veedol Aturbrio EP turbine oils are approved by major turbine manufacturers.

Performance Specifications:

- Veedol Aturbrio EP meet & exceed the performance requirements of
- Siemens TLV 901304 and TLV 901305
- Alstom HTGD 90117 W0001
- DIN 51515 part I & II
- GEK 32568G, 27070, 46505E
- CM P-38, P-55, P-54
- IS 1012: 2002 (Reaffirmed 2018)

Features/Benefits:

- Enhanced rust and corrosion protection prevents corrosion of critical components reducing maintenance and prolonging component life.
- Outstanding Oxidation Stability results in minimizing deposit formation and filter plugging. Ensures longer operating life, less maintenance and operating cost.
- Excellent Water Separability helps easy removal of water from lubrication system minimizing corrosion and rusting, increasing equipment reliability.
- Faster Air Release and High Resistance to Foaming reduces the possibility of cavitation failure, premature oil oxidation.

Approvals:

Veedol Aturbrio EP 46 (previous name: Aturbrio EP 46 Pro) has been approved by below OEMs for use in their turbines

- Siemens
- MAN Turbomachinery India Pvt. Ltd (Formerly Max Watt Turbines Pvt. Ltd.)
- Triveni Turbines

Application:

- Having enhanced anti-wear characteristics, these are recommended for use in most modern geared steam, gas and hydropower turbines. Also suitable for non-geared turbines.
- Centrifugal, axial, and turbo compressors where R&O type turbine oils are recommended.
- Can be used for lubrication of combined cycle gas turbines (CCGT).
- Also suitable for lubrication of bearings requiring high control over rust and corrosion.

Typical Properties:

Parameters	Test Method	32	46	68
Density @ 29.5°C	ASTM D4052	0.843	0.845	0.850
Kinematic Viscosity @ 40°C, cSt	ASTM D445	32.0	46.0	67.9
Kinematic Viscosity @ 100°C, cSt	ASTM D445	5.72	7.29	9.18
Viscosity Index	ASTM D2270	120	120	111
Flash Point (COC), °C	ASTMD92	234	238	246
Pour Point, °C	ASTM D97	-18	-18	-15
Copper Corrosion at 100°C, 3 hours	ASTM D130	1a	1a	1a
Foaming Tendency/ Stability Sequence I, mL/mL Sequence II, mL/mL Sequence III, mL/mL	ASTM D892	 0/0 10/0 0/0	 0/0 10/0 0/0	 0/0 10/0 0/0
TOST life, hours.	ASTM D943	> 10,000	> 10,000	> 10,000
Total Acid Number, mg KOH/g	ASTM D664	0.10	0.11	0.11
Rust Test	ASTM D665	Pass	Pass	Pass
Air release @ 50°C, minutes	ASTM D3427	1'33"	2'00"	5'12"
Water separability, minutes	ASTM D1401	2'21"	2'25"	6'37"
RPVOT (Oxidation stability), minute	ASTM D2272	2340	2458	3203
FZG, Failure load stage (A/8.3/90)	ASTM D5182	>12	>12	>12

The above typical properties are those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice.

STORAGE
All packages should be stored under cover. It should not be exposed to direct sunlight, intense cold and extreme temperature fluctuations. Where outside storage is unavoidable, drums should be laid horizontally or properly covered to avoid the possible ingress of water and damage to drum markings.

HEALTH, SAFETY AND ENVIRONMENT
The informtion on this product is available in the Material Safety Data Sheet (MSDS) as a guide to the precautions and safe handling of this product and its disposal. For further information, we recommend you review the MSDS. If handled correctly, there are no special precautions suggested.

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