

Product Data Sheet

Turbinol EP

Description and Applications

Saheli Turbinol EP series are supreme performance turbine oils specially designed for use in geared and non-geared steam turbines, gas turbines and combined cycle gas turbines (CCGT) including the gas turbines operating at high temperatures. These oils are formulated with high quality severely hydro-processed API Group II base oils and a proprietary ash-less additive package containing anti-oxidants, FZG booster, corrosion inhibitors and metal deactivators.

These oils possess outstanding thermal and oxidation stability, good load carrying capacity, excellent water separability, superior rust and corrosion inhibition, low foaming tendency, good air release properties and resistance to chemical degradation to provide excellent equipment protection, reliable operation, with reduced down-time and extended service life.

These oils exceed the performance requirements of major gas and steam turbine manufacturers.

Features and Benefits

- Outstanding thermal and oxidation stability prevents sludge formation, controls deposits and minimizes oil degradation leading to reliable operation.
- Superior anti-wear property and load carrying capability provide excellent protection for geared turbines.
- Excellent water separation capability resists formation of emulsion and leads to easy removal of excess water from lubrication system.
- Effective rust and corrosion inhibitors provide long-term protection to critical system components.
- Good air release properties and foam control avoid erratic operation and pump cavitations leading to trouble free operation.

Applications

- Large heavy-duty industrial gas turbines
- Power generation gas turbines
- Combined cycle gas turbines (CCGT)
- Turbines with heavily loaded gears
- Turbo compressors

Specifications

- SIEMENS TLV 90 13-04, BS 489, Alstom HTGD 90117
- DIN 51515 Part 1 (TD)/Part2 (TG),
- ISO 8086 TSA, TGA, TSE, TGE
- GEK 32568E/F, 28143A, 46506D, 10739a, 10194 1A
- ASTM D 4304, Type I (non-EP) and Type II (EP)
- Solar ES 9-224, Class II

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Test Parameters	Test Method	Typical Results			
		32	46	68	76
ISO VG		32	46	68	76
Density @ 15°C gm/cm ³	ASTM D1298	0.852	0.855	0.858	0.862
Viscosity Index	ASTM D2270	105	104	104	98
Viscosity @ 40°C (cSt)	ASTM D 445	32.2	46.3	68.3	100.5
Pour Point °C	ASTM D 97	-24	-21	-15	-15
Flash Point (COC) °C	ASTM D 92	212	220	222	224
Rust Test	ASTM D 665A/B	Pass	Pass	Pass	Pass
Copper Corrosion	ASTM D 130	1b	1b	1b	1b
Acid Number, mg KOH/g	ASTM D 974	0.1	0.1	0.1	0.1
Turbine Oil Stability Test (hrs)	ASTM D 943	10,000+			
Air Release, minutes	ASTM D 3427	3	4	5	6
RBOT, minutes	ASTM D 2272	1,000+			
FZG, fail load stage	DIN 51354 Part II	10	10	10	10

The information contained in this data sheet are indicative and correspond to the date of publication of this document. The above data are based on laboratory tests. It is the reader's interest to ensure whether the most recent version of the data sheet. A safety data sheet is available on request by our sales consultant. For more information, please contact the sales department.