

## **Product Data Sheet**

### **Turbinol**

### **Description and Applications**

**Saheli Turbinol** series are series are premium quality turbine oils specially designed to satisfy the demanding lubrication requirements of steam turbines in today's power industry. These oils are formulated with high quality severely hydro-processed API Group II base oils and a premium ash-less additive package containing field proven anti-oxidants, corrosion inhibitors and metal deactivators.

These oils possess outstanding thermal and oxidation stability, 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 and extended service life.

While primarily designed for lubrication of steam turbines, these oils are also suitable for water turbines and non-geared gas turbines. These oils are available in three ISO viscosity grades (32, 46 and 68) and a non-ISO grade (76) and exceed the performance requirements of specifications of major turbine manufacturers.

#### **Features and Benefits**

- Outstanding thermal and oxidation stability prevents sludge formation, controls deposits and minimizes oil degradation leading to reliable operation.
- 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**

- Applications requiring high quality Rust & Oxidation inhibited oils.
- Power generation steam turbines.
- Industrial steam turbines and Turbo compressors.
- Water turbines and non-geared gas turbines.

#### **Specifications**

- SIEMENS TLV 90 13-04, non-geared, BS 489
- DIN 51515 Part 1 (TD), ISO 8086 TSA, TGA
- GEK 32568E/F, GEK 28143A, GEK 46506D
- ASTM D 4304, Type I (non-EP)



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Test Parameters	Test Method	Typical Results			
ISO VG		32	46	68	76
Density @ 15°C gm/cm3	ASTM D1298	0.852	0.855	0.858	0.860
Viscosity Index	ASTM D2270	105	104	100	99
Viscosity @ 40°C (cSt)	ASTM D 445	32.2	46.3	68.1	76.8
Pour Point °C	ASTM D 97	-24	-21	-18	-15
Flash Point (COC) °C	ASTM D 92	212	218	226	232
Rust Test	ASTM D 665A/B	Pass	Pass	Pass	Pass
Copper Corrosion	ASTM D 130	1a	1a	1a	1a
Acid Number, mg KOH/g	ASTM D 974	0.07	0.07	0.07	0.07
Turbine Oil Stability Test (hrs)	ASTM D 943	10,000+			
Air Release, minutes	ASTM D 3427	2	3	4	5
RBOT, minutes	ASTM D 2272	1,000+			
Water Separability, min to 3ml emulsion @54°C	ASTM D1401	Pass			