Eternal Turbine Oil

Premium Industrial Turbine Oils

Eterna Turbine oils have been specially formulated to meet the high out-put steam turbines used in today's power industry.
They are based on a blend of specially chosen highly refined mineral oils to provide superior oxidation stability, thermal stability and ensure a high level of cleanliness.

Applications

- Power generation steam turbines
- Industrial steam turbines
- Gas Turbines and combined cycle turbines
- Certain industrial gear units
- High speed gears
- Certain oil-lubricated bearings

Performance Features

Provides excellent oxidation stability

- Surpasses GEK requirements for modified RBOT procedure
- Low copper activity and excellent rust protection
- Outstanding water shedding in regular and steam demulsibility tests
- Low foaming
- Low filter blockage tendency

Performance Characteristics

Eterna Turbine oil exceeds the requirements of

- GEK 32568F
- DIN 51515 Part 1
- British Standard 489
- BS 489
- Alstom HTGD 90117E
- Alstom HTGD 117E

  It meets the steam turbine specifications of GEK46506D(12/93) and GEK 2707(3/91)

Health, Safety & Environment

Eterna Turbine oils are unlikely to present any significant HSE hazard when properly used in the recommended application whilst good industrial, personal hygiene and environmental standards are maintained.

Avoid contact with skin. Use impervious gloves with used oil. In the event of skin contact, wash immediately with soap and water.

Dispose used oil safely. Do not discharge into drains, soil or water.

Advice

Advice on applications not covered in this leaflet may be obtained from Eterna plc, 5a Oba Adeyinka Oyekan Avenue, Ikoyi
Tel: 01-8981836, 8981842, 2691651

Typical Physical Characteristics

ISO VG Grade	**32**	**46**	**68**	**100**
API Gravity (ASTMD 1298)	**31.8**	**31**	**30.9**	**29.6**
Kinematic Viscosity (ASTM D445) @ 40°C cSt 100°C cSt	 30.0 5.12	 45 6.6	 66 8.5	 100 11.1
Viscosity Index (ASTMD2270)	97	97	96	95
Density @ 20°C (ASTM D1298)	0.870	0.875	0.880	0.882
Flash Point °C (COC) (ASTM D92)	210	215	220	240
Pour Point °C (ASTM D97)	-21	-18	-18	-15
Copper corrosion (ASTMD 130)	1A	1A	1A	1A
Neutralization number (ASTMD974)	0.06	2	2	3

Foam resistance (ASTM D892) m/s **Seq.1** **Seq.11**	 5/0 30/0	 5/0 30/0	 5/0 30/0	 5/0 20/0
Demulsibility (ASTM D1401) **Oil/water/emulsion ml** **Time minutes**	 40/40/0 10	 40/40/0 15	 40/40/0 15	 40/40/0 10
Rust resistance (ASTM D665)	pass	pass	pass	pass
Colour (ASTM D15000)	1.5	2	2	3

These characteristics are typical of current production. Whilst future production will conform to Eterna Specifications, variations in these characteristics may occur.