

## DESCRIPTION

Ultra Clean Turbine Oils is a range of extended service life, rust and oxidation-inhibited turbine oils. The products are formulated with highly refined base stocks and proprietary additive systems for severe and long-life turbine applications. They are highly resistant to oxidation and offer outstanding protection against the corrosion of critical metal surfaces. Ultra Clean Turbine Oils offers excellent demulsification properties and excellent filterability, very quick air release for effective performance. This product passed through severe filtration (5 micron and 10 micron filter bags) prior to filling and specifically filter to meet the ISO 4406 fluid cleanliness level. It is compatible with all common metals and sealing materials used in many turbine systems.

## APPLICATIONS

Ultra Clean Turbine Oils are recommended for use in industrial gas, steam turbine and turbo compressor applications. Also recommended for use in other applications which require premium quality rust and oxidation inhibited circulating oils.

## SUMMARY OF BENEFITS

- Excellent thermal and oxidative stability for extended oil life
- Very good water separation and corrosion inhibition properties
- Low sludge and deposit formation help turbine system clean and stay clean
- Rapid air and gas separation resulting in fluid lubrication efficiency
- Compatible with all gaskets, O-rings and sealing materials used in turbine and circulating systems

## SPECIFICATIONS

- ALSTOM HGD 90117T
- ANSI/AGMA 9005-D94 (R & O)
- BS 489
- CINCINNATI MACHINE P-39
- DIN 51 515 PART 1 (TD)
- DIN 51 515 PART 2 (TG)
- DIN 51 517 PART 1/2 (C/CL)
- GEK 101941 A
- GEK 107395 A
- GEK 28568 A
- GEK 32568 F
- GM LS-01/02/03-1-97
- GM LJ-03/04/06/10-2-97
- GM LJ-03/04/06/10-1-97
- MIL-PRF-17331J
- MORGAN WORCHESTER ADVANCED LUBRICANT
- MORGAN WORCHESTER STANDARD LUBRICANT
- SEB 181 225
- SIEMENS TLV 9013
- SOLAR ES 9-224 (CLASS I/CLASS II)
- VOITH SULZER VN 108

## STORAGE INSTRUCTIONS & HEALTH, SAFETY AND ENVIRONMENT INFORMATION

All packages should be stored under cover to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C. Health, safety and environmental information is provided for this product in the relevant Materials Safety Data Sheet, which can be obtained by contacting Gulf Western Oil on: 02 9673 9600.



ISO VG GRADE	TEST METHOD	32	46	68	100
DENSITY @ 15°C, kg/l	ASTM D4052	0.860	0.868	0.871	0.880
VISCOSITY, cSt					
@ 40°C	ASTM D445	31.1	45.2	67.7	97.5
@ 100°C	ASTM D445	5.37	6.81	8.80	11
VISCOSITY INDEX	ASTM D2270	106	105	102	97
FLASH POINT (COC), °C	ASTM D92	222	228	236	242
POUR POINT, °C	ASTM D97	-30	-27	-24	-21
TAN, mg KOH/g	ASTM D974	0.1	0.1	0.1	0.1
FOAMING CHARACTERISTICS, ml/mins					
Seq I 24 °C	ASTM D892	50/0	30/0	30/0	30/0
Seq II 93.5 °C	ASTM D892	30/0	20/0	20/0	20/0
Seq III 24 °C	ASTM D892	50/0	30/0	30/0	30/0
AIR RELEASE, SEPARATION TIME @50 °C, mins	IP 313	1.6	2.2	3.0	4.8
DEMUSIBILITY, mins	ASTM D1401	5	10	15	10
OXIDATION STABILITY RPVOT, mins	ASTM D2272	1700	1400	1400	1400
Tost, hrs to 2.0 Acid N°	ASTM D943	10.000+	10.000+	10.000+	10.000+
RUST PREVENTION	ASTM D665	Pass	Pass	Pass	Pass
COPPER CORROSION	ASTM D130	1a	1a	1a	1a

Typical characteristics are only a guide to industry and are not necessarily manufacturing or marketing specifications and do not constitute any legal liability.