



## OPTIMUS TURBINE AW

### PRODUCT DESCRIPTION:

Optimus Turbine AW range of turbine oils are premium quality antiwear type oils formulated from severely hydro treated base stocks. These oils are blended by using a complex additive system to provide required anti wear performance and oxidative stability against high local temperatures during operation. Optimus Turbine AW oils demonstrate excellent air release, foaming and water separation properties for steam turbines making them suitable and compliant for gas and steam turbines in single train sharing a common oil reservoir.

### APPLICATION:

Optimus Turbine AW range is recommended for the lubrication of highly loaded industrial gas turbines, aero derivative power turbines and driven machinery as well as turbo machinery.

### FEATURES & BENEFITS:

- Meets a wide range of steam and gas turbine oil requirements.
- Excellent thermal stability.
- Excellent oxidation resistance.
- Good demulsification properties
- Excellent corrosion inhibition performance

### PERFORMANCE LEVELS:

- BS 489: 1999
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)
- GEK 28143B, GEK 32568K, GEK 46506E, GEK 101941A, GEK 107395A
- ITN 52220.02
- ITN 52220.03
- Alstom HTGD 90117
- TLV 9013 04
- TLV 9013 05
- MAT812108, MAT812109
- Solar ES 9-224 AA Class II

### TYPICAL PROPERTIES:

PARAMETERS	TEST METHOD	UNIT	OPTIMUS TURBINE AW		
ISO Viscosity Grade	-	-	<b>32</b>	<b>46</b>	<b>68</b>
Density @ 15°C	ASTM D4052	kg/m <sup>3</sup>	TBR	TBR	TBR
Kinematic Viscosity @ 40°C / 104°F	ASTM D445	mm <sup>2</sup> /s	32	46	68
Kinematic Viscosity @ 100°C / 212°F	ASTM D445	mm <sup>2</sup> /s	5.5	7.0	8.9
Viscosity Index	ASTM D2270	-	112	110	105
Foam Sequence I - tendency / stability	ASTM D892	ml/ml	10/0	10/0	10/0
Air Release @ 50°C	ASTM D3427	minutes	3	3	6
Demulsification - Steam method	IP 19	seconds	80	100	110
Water Separation @ 54°C (40/37/3)	IASTM D1401	minutes	10	10	10
Pour Point	ASTM D97	°C	-18	-18	-15
Flash Point (COC)	ASTM D92	°C	220	230	240
Acid Number	ASTM D664	mgKOH/g	0.1	0.1	0.1
Rust test - synthetic seawater (24 hrs)	ASTM D665B	rating	Pass	Pass	Pass
Copper corrosion (3 hrs@100°C)	ASTM D130	rating	1b	1b	1b
Oxidation Stability (RPVOT)	ASTM D2272	minutes	1300	1300	1400
FZG Gear Scuffing ( A/8.3/ 90)	ASTM D5182	Failure Load Stage	10	10	10

**DISCLAIMER:** The test data provided above is not a specification but is indicative and may vary within permissible production tolerances. Lubrex reserves the right to modify this test data. Updated information will supersede previous versions, so please refer to the latest version of this Technical Data Sheet (TDS).

### HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further information on Safety Guidelines please refer to MSDS available on our website [www.lubrex.net](http://www.lubrex.net)

### HEALTH & SAFETY:

This product is not likely to present any significant health or safety hazards when properly used in the recommended application and good standards of personal hygiene are maintained. Reference is made to the Safety Data Sheet (SDS) which is available on request via your local sales office or via the internet [www.lubrex.net](http://www.lubrex.net)

### PROTECT THE ENVIRONMENT:

Take used oil to an authorized collection point. Comply with local regulation. Do not discharge into drains, soil or water.

### STORAGE:

We recommend to store all packages under cover. In case outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products should never be stored above 60°C, exposed to hot sun or freezing conditions.

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