



## OPTIMUS TURBINE OIL

### PRODUCT DESCRIPTION:

OPTIMUS TURBINE OIL is a lubricant specifically designed for use in steam and gas turbine applications. It is formulated with hydrotreated base oil and a combination of zinc free ashless additives which offers good oxidation stability and corrosion protection along with good demulsibility, antifoaming and air release properties.

### APPLICATION:

- It is used in stationary gas turbines, steam turbines and also in electrical or in driven by steam machines, such as generators, compressors, pumps and gearboxes. It can also be used for lubrication of hydraulic systems, compressors, gear transmissions, bearings and other industrial applications.

### FEATURES & BENEFITS:

- Good oxidation stability prolonging the service life of the oil and increasing service intervals.
- Good air release properties protect against air entrainment and ensure optimum oil film thickness.
- Good antifoaming properties avoid the buildup of foam, and reduce oil leakage from the system.
- Good water separation properties ensure that any water contamination can be easily separated from the oil, protecting equipment against rusting and corrosion and extending oil life.
- Anti-rust and corrosion prevention properties.

### PERFORMANCE LEVELS:

- DIN 51515 TEIL 1 (L-TD), TEIL 2 (L-TG)
- TLV 901304, TLV 901305
- MIL-L-17672 D
- BRITISH STANDARD BS 489
- GENERAL ELECTRIC GEK 32568 A
- GENERAL ELECTRIC GEK 32568 C
- CEGB STANDARD 207001
- BROWN BOVERI HTGD 90117
- U.S. STEEL 120
- WESTINGHOUSE ELECTRIC CORP. TURBINE OIL SPEC
- ALSTOM HTGD 90117 V0001 S
- SOLAR ES 9 224 REQUIREMENTS FOR GAS TURBINE OILS CLASS II (ISO VG 32)

### TYPICAL PROPERTIES:

PARAMETERS	TEST METHOD	UNIT	OPTIMUS TURBINE OILS	
ISO Viscosity Grade			32	46
Kinematic Viscosity @ 104°F /40°C	ASTM D-7042	cSt	32	46
Kinematic Viscosity @ 212°F /100°C	ASTM D-7042	cSt	5.44	6.84
Viscosity Index	ASTM D-2270	-	103	102
SP. Gravity @15°C/ 60°F	ASTM D-4052	g/cm <sup>3</sup>	0.860	0.868
Flash Point (min)	ASTM D-92	°C	220	230
Pour Point (max)	ASTM D-97	°C	-21	-21
TAN	ISO 6618	MgKOH/g	<0.2	<0.2
Rust Preventing Characteristics	ISO 7120	-	B	B
Copper Corrosion	ISO 2106	-	1a	1a
Emulsion Characteristics, 40-37-3	ISO 6614	min	10	15
Air Release to 0.2 %	ISO 9120	min	2	2
Foaming at 50 °C	ISO 6247	ml	50	50
Remaining Foam after 1 minute rest	ISO 6247	ml	0	0
Water Content	Karl Fischer	ppm	60	60
Zinc Content	ASTM D-4951	ppm	<10	<10
Oxidation Stability	ISO 4263	h	2700	2700



**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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