

# **SPECIALITY LUBRICANTS**

Technical Data Sheet



# **SPO TURBINE OIL**

## PRODUCT DESCRIPTION:

SPO 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

## TYPICAL PROPERTIES:

PARAMETERS	TEST METHOD	UNIT	SPO TURBINE OILS	
ISO Viscosity Grade			32	46
Kinematic Viscosity @ 104°F /40°C	ASTM D-7042	cSt	32	TBR
Kinematic Viscosity @ 212°F /100°C	ASTM D-7042	cSt	5.44	6.84
Viscosity Index	ASTM D-2270	-	103	102
Density @15°C/ 60°F	ASTM D-4052	g/cm3	TBR	TBR
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	-	В	В
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

#### DISCLAIMER:

The test data mentioned above is not a definitive specification but serves as an indication and may fluctuate within acceptable production tolerances. Venom retains the right to alter this test data. Any updated information will replace previous versions, so please consult the latest Technical Data Sheet (TDS).

### HEALTH & SAFETY, ENVIRONMENT:

Extended and repeated exposure to oil can lead to skin conditions. Please avoid contact. If you do come into contact with oil, wash the affected area immediately with soap and water. Do not dispose of used oil down drains or into the environment; instead, take it to an authorized used oil collection point.

### HEALTH & SAFETY:

This product is unlikely to pose significant health or safety risks when used properly in the recommended application and with good personal hygiene practices. For more information, please refer to the Safety Data Sheet (SDS), which is available upon request from your local sales office.

### PROTECT THE ENVIRONMENT:

Please take used oil to an authorized collection point and adhere to local regulations. Do not discharge it into drains, soil, or water.

### STORAGE:

We recommend storing all packages in a covered area. If outdoor storage is necessary, drums should be positioned horizontally to prevent water ingress and protect the markings. Products should never be stored above 60°C or exposed to direct sunlight or freezing temperatures.