



## PRODUCT TECHNICAL DATA SHEET

# WOQOD TURBINE OILS

## HIGH QUALITY TURBINE OILS

### PRODUCT DESCRIPTION

**WOQOD TURBINE OILS** are manufactured from special high quality turbine-grade base oils with high temperature corrosion and oxidation inhibitors designed for modern high performance Industrial Gas Turbines. The result is a product that exhibits outstanding oxidation performance to meet the requirements of severe operational conditions. It can ensure precise operation of servo-hydraulic controls and offers good corrosion protection. They also have excellent antifoam and air release characteristics which is important for the precision of the servo-control systems.

### APPLICATIONS

- ★ All types of stationary industrial gas turbines
- ★ Turbine gear sets which do not require extreme pressure performance lubricants
- ★ High pressure and high temperature steam turbines
- ★ High thermal efficiency combined cycle gas and steam turbine units

### RECOMMENDATIONS

**WOQOD TURBINE OILS** have been developed to meet General Electric and other major Turbine manufacturer specifications for Industrial gas turbines where high gas temperatures in the bearing housings can be experienced. It has good rationalisation properties which are important for operators who need to lubricate all types of gas and combined gas and steam turbines designed to operate on high performance mineral oil lubricants.

### PERFORMANCE STANDARDS AND OEM RECOMMENDATIONS

**WOQOD TURBINE OILS** meets and exceeds the following International specifications:

DIN	51515/1
BS	489-1983
ISO	6743/5 L TSA, TGA, TGB, TGE
JIS	K 2213 Type 2
Alstom	HTGD 90 117
Siemens	TLV 9013 04
Thermodyn	ISPSH 901 SDI, 902 SDI
General Electric	GEK 32 568F, 28143A
ABB STAL	81 21 01
Pignone Nuovo	SOM 173664, 23543/5
SOLAR	ES 9-224 U

### DOCUMENT INFORMATION

Issued by	Qatar Fuel (WOQOD) – Lubricants Section	Doc. Ref. No.	WL/TDS/T001
Last Update	24.03.2016	Page No.	1 of 2

## BENEFITS

**WOQOD TURBINE OILS** provides:

- ★ Extended oil service life using special high temperature oxidation inhibitors
- ★ Low maintenance and downtime using special severely refined base oils giving long life oxidation resistance
- ★ Precise servo-control valve operation through control of formation of harmful deposits
- ★ Rationalisation capability where gas and steam turbine units are combined

## TECHNICAL DATA\*

ISO GRADE	32	46	68	100
TOST Hrs to TAN = 2.0 mg KOH/g	> 10000	> 10000	> 10000	> 10000
RBOT mins ASTM D 2272 (Modified)	> 1300	> 1300	> 1200	> 1200
Viscosity:				
mm <sup>2</sup> /s @ 40 °C	31.70	47.66	69.69	99.7
mm <sup>2</sup> /s @100 °C	5.39	7.06	9.02	11.34
Viscosity Index	103	105	103	100
Flash Point COC, °C	230	234	236	236
Pour Point, °C	-12	-12	-12	-12

\*The information prepared provides the typical properties that are considered as representative. Some variation which will not affect performance is possible.

## HEALTH & SAFETY, ENVIRONMENT

The information on this product is available in the WOQOD Material Safety Data Sheet (MSDS) as a guide to the precautions and safe handling of this product and its disposal. For further information we recommend you review the MSDS. Handled correctly there are no special precautions suggested.

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Issued by	Qatar Fuel (WOQOD) – Lubricants Section	Doc. Ref. No.	WL/TDS/T001
Last Update	24.03.2016	Page No.	2 of 2