



## Teresstic T 32-100

### Turbine Oil

#### Product Description

Teresstic T 32-100 is a range of high quality turbine and circulating system oil lubricants designed for use in a wide variety of industrial applications. This product family is used in steam turbines, light duty stationary gas turbines as well as circulating systems. Continually improved over the years, Teresstic T 32-100 oils are formulated with carefully selected basestocks and highly effective additives, including antioxidants, rust and corrosion inhibitors and anti-foam agents. Teresstic T 32-100 is available in four ISO viscosity grades ranging from ISO VG 32 to 100. Teresstic T 32 and 46 are formulated for turbine applications where a premium quality lubricant with good oxidation stability, rust protection and excellent interfacial properties (like air release, low foaming tendencies and rapid air separation are required).

The Teresstic T family of products provides a versatile lubricant source for a wide range of industrial equipment. These products are manufactured under strict standards to assure consistent quality year after year. Teresstic T 32-100 oils provide the users with very reliable and efficient operation, both in turbine applications and other industrial applications. They are particularly resistant to the effects of prolonged high temperature exposure and perform very well in circulating systems - even those with short oil residence times. This combination of benefits makes Teresstic T 32-100 the right choice for many users.

#### Features and Benefits

The Teresstic T 32-100 series of products are recognised for their high quality and reliability, as well as performance capabilities in tough conditions. This family of products is manufactured to the strictest quality standards.

This series of products, with its wide range of viscosity grades, superior performance in a very wide range of industrial applications. The high quality base oils and selected additives used provide excellent oxidation resistance performance, critical in light duty gas and steam turbine applications. Excellent water separability, resistance to foaming and air entrainment are important performance features for all circulation systems, especially those with short residence times. Very good rust and corrosion performance provides protection for all applications. Some of the features and potential benefits offered by these oils are:

- Wide range of industrial applications, including steam and light duty gas turbines, for versatility and efficient inventorying
- High quality products with strong reputation for reliability resulting in less maintenance and unanticipated downtime
- Long life in turbine and circulating applications leads to lower product replacement costs
- Manufactured under our stringent Quality Integrity Management System (QIMS) quality control standards
- Formulated from high quality base oils and specially selected functional additives

#### Applications

Teresstic T 32-100 is a range of premium quality turbine lubricants designed for use in a wide variety of industrial applications including:

- Circulating systems exposed to moderately high temperatures and requiring long service life
- Land-based and marine steam turbines and light duty industrial gas turbines requiring mineral oil
- Hydro-turbines
- Hydraulic systems

## Specifications and Approvals

<b>Teresstic T meets or exceeds the requirements of:</b>	<b>32</b>	<b>46</b>	<b>68</b>	<b>100</b>
Siemens Industrial Turbo Machinery Mat 812101	X			
Siemens Industrial Turbo Machinery Mat 812102		X		
Alstom NBA P 50001 A	X	X		
GE GEK 46506-D	X			
GE GEK 28143-A	X	X		
GE GEK 27070	X			
Siemens Westinghouse PD-55125Z3	X			
DIN 51515-1 2010-02	X	X	X	X
JIS K2213 Type 2 with additives	X	X	X	
China National Standard GB 11120-89	X	X	X	

<b>Teresstic T has the following builder approvals</b>	<b>32</b>	<b>46</b>	<b>68</b>	<b>100</b>
Alstom Power HTGD 90 117	X	X	X	
Siemens Power Generation TLV 9013 04, non-geared	X	X		
Siemens Power Generation TLV 9016 03				X

## Typical Properties

	<b>TeressticT 32</b>	<b>TeressticT 46</b>	<b>TeressticT 68</b>	<b>TeressticT 100</b>
ISO Viscosity Grade	32	46	68	100
Viscosity, ASTM D 445				
cSt @ 40° C	32	46	68	100
cSt @ 100° C	5.4	6.8	8.5	10.6
Viscosity Index, ASTM D 2270	100	100	95	95
Pour Point, °C, ASTM D 97	-30	-30	-30	-27
Flash Point, °C, ASTM D 92	222	218	220	242
Density@15° C kg/l, ASTM D 1298	0.86	0.87	0.87	0.88
TOST, ASTM D 943, Hours to 2 NN	5000	4500	3500	2500
Copper Strip Corrosion, ASTM D 130,	1B	1B	1B	1B
Rust Prevention, ASTM D 665, Sea Water	Pass	Pass	Pass	Pass (Distilled Only)
Water Seperability, ASTM D 1401,Min. to 3 ml emulsion @ 54° C	15	15	20	20
Foam Test, ASTM D 892, Seq I				
Tendency/stability, ml/ml	0/0	0/0	0/0	10/0

## Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

Toxicity class: free BAG T No.: 621100

The Mobil logotype, the Pegasus design and Mobilgear are trademarks of Exxon Mobil Corporation, or one of its subsidiaries.

5-2011

Esso Petroleum Company limited  
ExxonMobil House, Ermyn Way, Leatherhead, Surrey KT22 8UX

44 (0)1372 222000  
<http://www.exxonmobil.com>

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit [www.exxonmobil.com](http://www.exxonmobil.com) ExxonMobil is comprised of numerous affiliates and subsidiaries, many with names that include Esso, Mobil, or ExxonMobil. Nothing in this document is intended to override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entities.

© 2001-2011 Exxon Mobil Corporation. All rights reserved..