Mobil[®]

Teresstic™ T Series

Mobil Industrial , Denmark

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 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 formulate carefully selected basestocks and highly effective additives, including antioxidants, rust and corrosion inhibitors and anti-foam agents. Teresstic T 32-100 is avail 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 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 stat 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 industrial applications. They are particularly resistant to the effects of prolonged high temperature exposure and perform very well in circulating systems - even thos 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 far 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 se additives used provide excellent oxidation resistance performance, critical in light duty gas and steam turbine applications. Excellent water seperability, resista foaming and air entrainment are important performance features for all circulation systems, especially those with short residence times. Very good rust and cor 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

| This product has the following approvals: | 32 | 46 | 68 | 100 |
|-------------------------------------------|----|----|----|-----|
| GE Power (former Alstom Power) HTGD 90117 | х | х | | |
| Siemens TLV 9013 04 | х | х | | |

| This product is recommended for use in applications requiring: 32 46 68 1 | 100 |
|---------------------------------------------------------------------------|-----|
|---------------------------------------------------------------------------|-----|

Teresstic[™] T Series

| Page | 2 | of | 3 |
|------|---|----|---|
|------|---|----|---|

| This product is recommended for use in applications requiring: | 32 | 46 | 68 | 100 |
|----------------------------------------------------------------|----|----|----|-----|
| GE Power GEK 27070 | х | | | |
| GE Power GEK 28143A | х | х | | |

| This product meets or exceeds the requirements of: | 32 | 46 | 68 | 100 |
|----------------------------------------------------|----|----|----|-----|
| China GB 11120-2011, L-TSA(Class A) | х | х | | |
| China GB 11120-2011, L-TSA(Class B) | х | х | | |
| DIN 51515-1:2010-02 | | | х | |
| DIN 51515-1:2010-02 | Х | Х | | х |
| GE Power GEK 46506D | х | | | |
| JIS K-2213 Type 2 | х | х | х | |
| Siemens Industrial Turbo Machinery MAT 812101 | х | | | |
| Siemens Industrial Turbo Machinery MAT 812102 | | х | | |

Properties and Specifications

| Property | 32 | 46 | 68 | 100 |
|----------------------------------------------------------------|--------|--------|--------|---------|
| Grade | ISO 32 | ISO 46 | ISO 68 | ISO 100 |
| Copper Strip Corrosion, 3 h, 100 C, Rating, ASTM D130 | 1B | 1B | 1B | 1B |
| Density @ 15 C, kg/l, ASTM D1298 | 0.86 | 0.87 | 0.87 | 0.88 |
| Emulsion, Time to 3 mL Emulsion, 54 C, min, ASTM D1401 | 15 | 15 | 20 | 20 |
| Flash Point, Cleveland Open Cup, °C, ASTM D92 | 222 | 218 | 220 | 242 |
| Foam, Sequence I, Stability, ml, ASTM D892 | 0 | 0 | 0 | 0 |
| Foam, Sequence I, Tendency, ml, ASTM D892 | 0 | 0 | 0 | 10 |
| Kinematic Viscosity @ 100 C, mm2/s, ASTM D445 | 5.4 | 6.8 | 8.5 | 10.6 |
| Kinematic Viscosity @ 40 C, mm2/s, ASTM D445 | 32 | 46 | 68 | 100 |
| Pour Point, °C, ASTM D97 | -30 | -30 | -30 | -27 |
| Rust Characteristics, Procedure A, ASTM D665 | | | | PASS |
| Rust Characteristics, Procedure B, ASTM D665 | PASS | PASS | PASS | |
| Turbine Oil Stability Test, Life to 2.0 mg KOH/g, h, ASTM D943 | 5000 | 4500 | 3500 | 2500 |
| Viscosity Index, ASTM D2270 | 100 | 100 | 95 | 95 |

Teresstic[™] T Series

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

11-2023 ExxonMobil Nordic Affiliate of ExxonMobil Nordic AS, Norway Gydevang 39-41 DK-3450 Alleroed, Denmark Tel: +45 45 99 02 10 Fax : +45 45 99 02 80

www.exxonmobil.no

Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect pro performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without nc All products may not be available locally. For more information, contact your local ExxonMobil contact or visit 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 intende override or supersede the corporate separateness of local entities. Responsibility for local action and accountability remains with the local ExxonMobil-affiliate entit



Page 3 of 3