

## EMIRATES 1 TURBINE OILS

### *(Long Life Turbine Oils)*

#### **DESCRIPTION**

**EMIRATES 1 TURBINE OILS** are advanced, specialized fluids designed to provide exceptional lubrication and cooling benefits for industrial turbine systems where the highest quality rust and oxidation inhibited lubricants are required. These fluids provide excellent operating and maintenance benefits across a broad temperature range for increased efficiency, performance, and equipment protection. **EMIRATES 1 TURBINE OILS** have increased discharge flow rates and decreased internal pump leakage rates resulting in increased pumping efficiency, and less fluid leakage and waste.

#### **APPLICATIONS**

**EMIRATES 1 TURBINE OILS** are designed and recommended for use in turbine systems operating on steam or gas as well as a high temperature bearing lubricant and coolant. These oils are formulated to meet the demands of non-g geared steam, hydro-electric, and gas turbine and bearing lubrication. They are also ideal for reduction gear assemblies in certain marine applications.

**EMIRATES 1 TURBINE OILS** are excellent lubricants for many other industrial applications such as air-line lubricators, industrial gear cases, and air compressor applications where R&O oils are recommended by the OEM.

#### **Properties**

**EMIRATES 1 TURBINE OILS** are manufactured with the highest quality, ultra-pure paraffinic base oils and high performance additives. These advanced base oils have been chosen to ensure exceptional performance and provide long term, trouble free service. Special inhibitor technology enhances these products by improving resistance to oxidation breakdown and inhibiting the formation of deposits on critical machinery surfaces, delivering reliable and consistent performance in industrial circulation systems that are subject to wide ambient and system operating temperatures. This special technology also includes advanced foam and air release control as well as improved low temperature operation capability improved by cold flow improvers.

#### **Product Benefits**

- **High viscosity index**
- **Foam control**
- **Optimal oil service life**
- **Superior thermal stability**
- **Smooth operation.**
- **Excellent fluid stability and water separation characteristics.**

#### **Recommendations / Specifications**

**EMIRATES 1 TURBINE OILS** are recommended for use where the following specifications are required (in the appropriate viscosity grade): **General Electric** – GEK 28143A, GEK 32568F, GEK 46506D, GEK 27070, GEK 107395, **ABB** – K 110 812101, **British Standard** – 489, **Westinghouse** – 1500 00 20, **Solar Turbines** – ES 9 224, **Cooper** – SE 1144, **Siemens** – TLV 901304, 901305, **Siemens Westinghouse** – M-55125Z3, **ALSTOM (ABB)** – HTGD 90117, **ASTM** – D4304 type I, **DIN** – 51515 Part 1, Part 2, 51524 Part 1, **Cincinnati Machine** P-38, P-54, P-55, **MIL-L-17672C/D**, **AFNOR** – E 48600 HL, **US Steel** – 126 & **Denison HF-1**.

#### **TYPICAL TECHNICAL PROPERTIES**

<b>ISO Viscosity Grade</b>	<b>32</b>	<b>46</b>	<b>68</b>	<b>100</b>	<b>150</b>
Appearance, Visual	B&C	B&C	B&C	B&C	B&C
Density at 15°C, g/ml, ASTM D4052	0.86	0.865	0.870	0.875	0.875
Kinematic Viscosity at 40°C, mm <sup>2</sup> /s, ASTM D445	32	46	66.4	100	150
Kinematic Viscosity at 100°C, mm <sup>2</sup> /s, ASTM D445	5.56	7.0	8.86	11.66	15.08
Viscosity Index, ASTM D2270	110	108	106	104	100
Flash Point(COC), °C, ASTM D92	200	210	220	226	230
Pour Point, °C, ASTM D97	-39	-36	-33	-30	-27
Copper Corrosion (3hr@100°C), ASTM D130	1.0	1.0	1.0	1.0	1.0
Rust protection Proc B, ASTM D665	PASS	PASS	PASS	PASS	PASS
Distilled Water	PASS	PASS	PASS	PASS	PASS
AGMA grade	-	1	2	3	4

\*C & B: Clear & Bright

**Note:** The information on this Product Data Sheet is believed to be accurate and is typical of current production. Specifications are subject to change without notice. For additional queries, please contact Emirates 1 Technical Service Department.

**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). Safety Data Sheets available on request.

**Available in:** **Cartons:** 12x 1 L, 24x1 L, 4x5L 6 x 4 L, 6 x 5 L, **Pails:** 20 L & 25 L., **Drums:** 200 L, 208 L