



## Perfecto XEP 46 Superclean

Premium antiwear turbine lubricant

### Description

Castrol Perfecto™ XEP 46 Superclean turbine oil is formulated from severely hydro treated premium mineral base stocks together with a complex additive system to provide requisite anti wear performance and oxidative stability.

This product is specifically filtered to meet an ISO 4406 fluid cleanliness level of 14/11 at the point of fill.

### Application

Castrol Perfecto™ XEP 46 Superclean is primarily intended for the lubrication of highly loaded industrial gas turbines, aero derivative power turbines & driven machinery and turbo machinery where the lubricant is exposed to high local temperatures during operation and the heat soaking period during run down.

Castrol Perfecto™ XEP 46 Superclean possesses the requisite air release, foaming and water separation properties for steam turbines making them suitable and compliant for gas and steam turbines in single train sharing a common oil reservoir.

Castrol Perfecto™ XEP 46 Superclean meets the requirements of the following specifications:

- BS 489: 1999
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)
- General Electric Oil & Gas
  - ITN52220.02
  - ITN52220.03
- Alstom HTGD 90117
- Siemens TLV 9013 04
- Siemens TLV 9013 05
- Solar ES 9-224Y, Class II

### Advantages

- Meets or exceeds a wide range of both steam and gas turbine specifications
- Designed for a wide range of applications making it possible to rationalise grades without risk of misapplication
- Excellent thermal / oxidation stability
- Good water separation and corrosion inhibition performance

## Typical Characteristics

Name	Method	Units	Perfecto XEP 46 Superclean
ISO Viscosity Grade	-	-	46
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	860
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	46
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	7.1
Viscosity Index	ISO 2909 / ASTM D2270	-	112
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	minutes	2
Demulsification - Steam method	IP 19	seconds	60
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	minutes	< 30
Pour Point	ISO 3016 / ASTM D97	°C (°F)	-15 (5)
Flash Point - open cup method	ISO 2592 / ASTM D92	°C (°F)	234 (453)
Acid Number	ISO 6619 / ASTM D664	mgKOH/g	0.05
Copper corrosion (3 hrs@100°C/ 212°F)	ISO 2160 / ASTM D130	Rating	1 max
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	Rating	Pass
Oxidation Stability - Rotating Pressure Vessel test	ASTM D2272	minutes	1200
Oxidation Stability - TOST	ISO 4263-1 / ASTM D943	hours	> 10000
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	10

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.

## Storage

All packages should be stored under cover. Where outside storage is unavoidable drums should be laid horizontally to avoid the possible ingress of water and the obliteration of drum markings. Products should not be stored above 60°C, exposed to hot sun or freezing conditions.

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