

## Perfecto™ HPT 46

Gas turbine lubricant

### Description

Castrol Perfecto™ HPT 46 is based upon highly refined mineral oils, selected for their inherent high oxidation stability and resistance to sludge formation, further reinforced by oxidation inhibitors chosen to give maximum protection at high temperatures. This high oxidation stability ensures long oil life and minimizes deposit formation and lacquering within the turbine lubrication system.

### Application

Perfecto HPT 46 is a high performance turbine oil, specifically developed for Industrial gas turbines where the lubricant is likely to be exposed to very high local temperatures. Castrol Perfecto HPT 46 also possess the good water and air separation properties and resistance to foaming which is required for the lubrication of steam turbines, making it the preferred choice for Combined Cycle generating systems where the steam and gas turbines share a common oil supply.

Perfecto HPT 46 complies with or exceeds the following standards and specifications:

- British Standard BS 489
- Deutsch Industrie Normen DIN 51515
- Alstom HTGD 90117
- General Electric GEK 32568G
- Siemens TLV 9013 04
- Siemens Westinghouse 55125Z3

### Advantages

- Excellent thermal stability leads to long oil life.
- Suitable for the lubrication of steam as well as gas turbines, allowing the use of one oil for Combined Cycle generating systems
- Compatible with all paints, seals and metals commonly used in turbine lubrication systems ensuring that there is no need to change seals or components when changing to this oil

## Typical Characteristics

Name	Method	Units	Perfecto HPT 46
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	0.877
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	46
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D 445	mm <sup>2</sup> /s	6.7
Viscosity Index	ISO 2909 / ASTM D2270	-	-18
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	240
Acid Number	ISO 6619 / ASTM D664	mg KOH/g	0.1
Air Release Mins to 0.2%v @ 50°C	ISO 9120 / ASTM D3427	min	3
Demulsification	IP 19	seconds	60
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml	0
Foam Sequence II - tendency / stability	ISO 6247 / ASTM D892	ml	0
Foam Sequence III - tendency / stability	ISO 6247 / ASTM D892	ml	0
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass
Copper corrosion (3 hrs@100°C/212°F )	ISO 2160 / ASTM D130	-	1A
Oxidation Stability - TOST	ISO 4263-1 / ASTM D943	hours	>5000
Oxidation Stability - Rotating Pressure Vessel test	ASTM D2272	minutes	850

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° exposed to hot sun or freezing conditions.

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Castrol Industrial, Technology Centre , Whitchurch Hill , Pangbourne , Reading , RG8 7QR , United Kingdom

<http://msdspds.castrol.com>