

## Perfecto XPG 32

Premium low varnish turbine oil

### Description

Castrol Perfecto XPG 32 is formulated from unique highly refined base oils coupled with complex additive technology to provide exceptional resistance to the formation of insoluble degradation products that ultimately deposit out as varnish, however without compromise to its antiwear performance.

### Application

Perfecto XPG 32 is primarily intended for the lubrication of highly loaded industrial gas turbines whether on base load or intermittent running where high local temperatures during operation and the heat soaking period during run down are experienced.

Perfecto XPG 32 possess the requisite air release, foaming and water separation properties for steam turbines making them suitable for gas and steam turbines in single train sharing a common oil reservoir.

Perfecto XPG 32 meets or exceeds the requirements of:

- BS 489: 1999
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)
- General Electric
  - GEK 28143b
  - GEK 32568k
  - GEK 46506E
  - GEK 101941A
  - GEK 107395A
- Alstom HTGD 90117
- Siemens
  - TLV 9013 04
  - TLV 9013 05
  - MAT812108
- Solar ES 9-224 AA Class II

### Advantages

- Excellent thermal / oxidation stability even under extremes of thermal stress
- Good water separation and corrosion inhibition performance
- Excellent filterability minimising the possibility of additive removal even under ultra-fine filtration and the presence of moisture
- Well proven in high performance gas turbines with extensive field experience

## Typical Characteristics

Name	Method	Units	Perfecto XPG 32
ISO Viscosity Grade	-	-	32
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m <sup>3</sup>	863
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	32
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	5.5
Viscosity Index	ISO 2909 / ASTM D2270	-	105
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Foam Sequence II - tendency / stability	ISO 6247 / ASTM D892	ml/ml	20/0
Foam Sequence III - tendency / stability	ISO 6247 / ASTM D892	ml/ml	0/0
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	minutes	3
Water Separation - steam method	IP 19	seconds	120
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	minutes	10
Pour Point	ASTM D5950	°C (°F)	-12 (10)
Flash Point - open cup method	ISO 2592 / ASTM D92	°C (°F)	226 (439)
Acid Number	ISO 6619 / ASTM D664	mgKOH/g	0.1
Rust test – distilled water (24 hrs)	ISO 7210 / ASTM D665A	rating	Pass
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	rating	Pass
Copper corrosion (3 hrs@100°C/212°F)	ISO 2160 / ASTM D130	rating	1b
Oxidation Stability - Rotating Pressure Vessel test	ASTM D2272	minutes	1300
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1 / ASTM D5182	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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