



Perfecto SN 46

Synthetic gas turbine lubricant

Description

Perfecto™ SN 46 is a synthetic hydrocarbon based lubricant which has been developed for the lubrication of industrial gas turbines, gas compressors and other items of rotating equipment where high temperatures are encountered or where the critical nature of the plant demands a premium lubricant to ensure long life and reliable operation with extended periods between shut-downs.

Perfecto SN 46 has a very high degree of both thermal and oxidative stability which combine to ensure that the lubricating oil system is maintained free from lacquers and deposits especially in the key areas of turbine bearings and scavenge lines, gearboxes (where a high degree of aeration can give rise to oxidation even at moderate temperatures), gas compressor seals and fuel or governor control valves.

Application

Perfecto SN 46 is designed for use as a gas turbine lubricant. Its major advantages over mineral oils are particularly demonstrated in its ability to protect equipment during extreme cold weather starting, extended high temperature operation, and where the unit is subject to severe heat soaking after shutdown. Other notable features are excellent wear and rust protection, controlled rubber swell and prevention of sludge or deposit formation.

Meets the requirements of:-

BS 489:1989, DIN 51515 Part 2,

Alstom HTDG 90117,

General Electric GEK 28143A, GEK 32568G, GEK 101941A,

Siemens MAT 812106, Siemens TLV 9013 04 and 05,

Solar ES 9-224U and

MAN Turbo SP10000494596.

Perfecto SN 46 is compatible with other synthesised hydrocarbon fluids and with mineral oils. It is not compatible with synthetic ester gas turbine lubricants or with phosphate ester hydraulic control fluids.

Features and Benefits

- High resistance to oxidation and additional load carrying performance for geared turbines
- Highly stable formulation ensures a long oil life and minimises the risk of sludging or lacquering even in areas exposed to high temperatures, severe aeration and low oil flow. This prevents the premature failure of critical components such as servo valves which are the susceptible parts of the lubricating oil system. This stability maximises the availability of equipment and minimises maintenance activities during shutdown periods.

Technical Data

Name	Method	Units	Perfecto SN 46
Density @ 15°C / 59°F	ISO 12185 / ASTM D4052	kg/m ³	837
Kinematic Viscosity @ 40°C / 104°F	ISO 3104 / ASTM D445	mm ² /s	46
Kinematic Viscosity @ 100°C / 212°F	ISO 3104 / ASTM D445	mm ² /s	7.8
Viscosity Index	ISO 2909 / ASTM D2270	-	137
Pour Point	ISO 3016 / ASTM D97	°C/°F	-54 / -65
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	235 / 455
Acid Number	ISO 6619 / ASTM D664	mgKOH/g	0.1
Air Release @ 50°C / 122°F	ISO 9120 / ASTM D3427	min	1
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614 / ASTM D1401	min	15
Foam Sequence I - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Foam Sequence II - tendency / stability	ISO 6247 / ASTM D892	ml/ml	0/0
Foam Sequence III - tendency / stability	ISO 6247 / ASTM D892	ml/ml	10/0
Rust test - synthetic seawater (24 hrs)	ISO 7120 / ASTM D665B	-	Pass
Copper corrosion (3 hrs@100°C/212°F)	ISO 2160 / ASTM D130	Rating	1b
Oxidation Stability - TOST	ISO 4263-1 / ASTM D943	hrs	>10,000
Sludging and Corrosion - TOST 1000 hour	ASTM D4310	TAN increase (mgKOH/g)	0.14
Oxidation Stability - Rotating Pressure Vessel test	ASTM D2272	min	3,000
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	9

Subject to usual manufacturing tolerances.

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