PRODUCT DATA SHEET

Q8 van Gogh EP 46

High performance turbine oil

Description

Q8 van Gogh EP 46 is a high performance turbine oil based on selected premium base fluids. This product is developed for use in steam and gas turbines as well as combined cycle applications, including geared turbines. Q8 van Gogh EP 46 meet the challenges of the latest generation turbines making it suitable to operate under mild to severe conditions. Designed as part of the Q8Oils clean technology program to ensure superior varnish/deposit control and good load carrying capabilities in combination with long oil life.

Applications

Industrial steam- and gas turbines, including geared turbines and combined cycle operations Hydroelectric turbines Circulation systems where turbine oil quality is required Centrifugal- and axial pumps, turbo-compressors, gas booster compressors (GBC) where turbine oil quality is recommended

Features	Benefits
Turbine performance	*Long trouble free service life, excellent turbine protection and outstanding resistance against ageing*
Enhanced technology	*Developed with outstanding anti-wear/extreme pressure protection to meet the load carrying requirements of geared turbines*
Lower operational costs	*Specifically developed with excellent protection against the formation of varnish*

Specifications & Approvals

ASTM	D 4304, Type II (EP)	**ISO**	8068
British Standard	489	**Indian Standard**	IS 1012:2002
Chinese Standard	GB 11120-2011	**JIS**	K 2213 Type 2
DIN	51515-1 L-TDP	**Siemens**	MAT812109
DIN	51515-2 L-TGP	**Siemens**	TLV 9013 04
Fincantieri		**Siemens**	TLV 9013 05
GE Thermodyn	ISPSH901SDI	**Solar Turbines**	ES 9-224 (Class I)
ISO	6743-5 L-TGE	**Turbomach**	ES 9-224 (Class I)
ISO	6743-5 L-TSE		

Properties

	Method	*Unit*	*Typical*
Density, 15 °C	*D 4052*	*g/ml*	*0,875*
Kinematic Viscosity, 40 °C	*D 445*	*mm²/s*	*46.0*
Kinematic Viscosity, 100 °C	*D 445*	*mm²/s*	*7*
Viscosity Index	*D 2270*	*-*	*109*
Total Acid Number	*D 974*	*mg KOH/g*	*0.13*
Oxidation Characteristics (TOST)	*D 943*	*hrs*	*> 10.000*
Modified Oxidation Stability (RPVOT)	*D 2272*	*%*	*95*
Oxidation Stability (RPVOT)	*D 2272*	*min*	*> 1.000*
Foam, 5 min blowing, seq. 1-2-3	*D 892*	*ml*	*10/10/10*
Foam, 10 min settling, seq. 1-2-3	*D 892*	*ml*	*0/0/0*
Oxide Ash	*D 482*	*% mass*	*< 0.001*
Zinc content	*D 4951*	*mg-kg*	*< 5*
Pour Point	*D 97*	*°C*	*-36*
Flash Point, COC	*D 92*	*°C*	*222*
Colour	*D 1500*	*-*	*L 1.0*
Air Release, 50 °C	*D 3427*	*min*	*4*
Emulsion, Distilled Water, 54.4 °C	*D 1401*	*-*	*40/40/0 (10)*
Rust Test, Proc. A and B, 24 h	*D 665*	*-*	*pass*
Copper Strip, 3 h, 100 °C	*D 130*	*-*	*1*
FZG Test, A/8.3/90	*DIN 51354*	*load stage*	*10*
Four Ball Wear, 392 N, 75 °C, 1200 rpm	*D 4172*	*mm*	*0.35 - 0.5*

The figures above are not a specification. They are typical figures obtained within production tolerances.

Sustainability

*The product Carbon Footprint (PCF), cradle-to-gate (Q8Oils state of the art facility in Belgium), of Q8 van Gogh EP 46 is **1.21** kg CO_2eq / kg.*
Please contact Q8Oils to learn more about the positive environmental impact, the handprint, of this product.
To ensure accuracy and reliability, the PCF calculation tool has been verified by an independent third party. The verification report is available in the disclaimer.
For more info check here

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