

## Q8 van Gogh 46

High performance turbine oil

### Description

Q8 van Gogh 46 is a high performance turbine oil based on selected premium base fluids. This product is developed for use in steam and gas turbine circulation systems. Q8 van Gogh 46 meets 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 in combination with long oil life.

### Applications

Industrial steam- and gas turbines Hydroelectric turbines Circulation systems where R&O type turbine oil is required Centrifugal- and axial pumps, and turbo-compressors, where R&O type turbine oil is recommended

### Features

**Turbine performance**

### Benefits

Long trouble free service life, excellent turbine protection and outstanding resistance against ageing

**Enhanced technology**

Outstanding formulation in order to protect the turbine against corrosion and to minimize the build-up of deposits and lacquer in the turbine

**Lower operational costs**

Specifically developed with excellent protection against the formation of varnish

### Specifications & Approvals

ASTM	D 4304, Type I	ISO	6743-5 L-TSA
British Standard	489	ISO	8068
DIN	51515-1 L-TD	JIS	K 2213 Type 2
DIN	51515-2 L-TG	Siemens	TLV 9013 04
ISO	6743-5 L-TGA	Siemens	TLV 9013 05

## Properties

	Method	Unit	Typical
Appearance	Visual	-	Bright and Clear
Density, 15 °C	D 4052	g/ml	0,868
ISO Viscosity Grade	-	-	46
Kinematic Viscosity, 0 °C	D 445	mm <sup>2</sup> /s	597
Kinematic Viscosity, 40 °C	D 445	mm <sup>2</sup> /s	46
Kinematic Viscosity, 100 °C	D 445	mm <sup>2</sup> /s	6.9
Viscosity Index	D 2270	-	105
Total Acid Number	D 974	mg KOH/g	0.05
Pour Point	D 97	°C	-36
Flash Point, COC	D 92	°C	222
Colour	D 1500	-	L 0.5
Air Release, 50 °C	D 3427	min	3
Emulsion, Distilled Water, 54.4 °C	D 1401	-	40-40-0(10)
Steam Demulsibility	DIN 51589-1	sec.	60
Foam, 10 min settling, seq. 1-2-3	D 892	ml	0/0/0
Foam, 5 min blowing, seq. 1-2-3	D 892	ml	10/20/10
Rust Test, Proc. A and B, 24 h	D 665	-	pass
Q panel rust preventive test, 24 hr @ 27 °C	KPI 31	Rating	
Copper Strip, 3 h, 100 °C	D 130	-	1
Oxidation Characteristics (TOST)	D 943	hrs	>10.000
Oxidation Stability (RPVOT)	D 2272	min	>1.000
Modified Oxidation Stability (RPVOT)	D 2272	%	95
Zinc content	D 4951	mg/kg	absent (<5)
Oxide Ash	D 482	% mass	<0.01
Solid Foreign Particles	Millipore, 0.45 µm	-	absent
FZG Test, A/8.3/90	DIN 51354	load stage	≥ 6

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