



TURBINE OILS

ADDINOL TURBINE OIL TP 46

PRODUCT DESCRIPTION

ADDINOL Turbine oil TP 46 is a lubrication and control fluid on the basis of high-quality mineral oil raffinates and an optimally adjusted additive combination; they are free of zinc.

APPLICATION

- Highly suitable for the application in steam gear motors which require additional EP properties because of specific performance requirements
- Also applicable in typical steam, gas and water-powered turbines with normal thermal loads
- Also suitable for the application in turbo compressors

PLEASE NOTE

Confirmation of long oil operating times by approved application in numerous power plants which are equipped with gear turbines.

SPECIFICATIONS/APPROVALS

Approval for:

- Doosan Škoda Power

Meets and surpasses the requirements of:

- DIN 51515-1 (FZG > 8): TD / TDP
- Siemens TLV 90 1304/01
- Alstom HTGD 90117
- Voith Turbo GmbH

Viscosity grade corresponds to:

- ISO classification 3448

DELIVERY

Delivery preferable in IBCs and drums.

CHARACTERISTICS

- Improved ageing stability
- Enhanced corrosion protection against steel and non-ferrous metals
- Very good wear protection
- Low foaming tendency and excellent air separation ability

ADVANTAGES AND BENEFITS

- Extremely long oil change intervals, cost saving possible
- Very good protection of critical devices with increased operational safety
- Efficient protection of machine parts
- Prevents foaming, quick separation of entrained air





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SPECIFICATIONS AND TYPICAL PARAMETERS

Feature	Test condition / unit		Turbine Oil TP 46	Method acc. to
ISO viscosity grade			46	DIN 51519
Density	at 15°C	kg/m ³	861	DIN 51757
Viscosity	at 40°C	mm ² /s	46	ASTM D 7042
	at 100°C	mm ² /s	7.3	
Flash point	COC	°C	min. 230	DIN EN ISO 2592
Pour point		°C	max. - 12	ASTM D 7346
Neutralisation number		mg KOH / g	< 0.2	DIN 51558-1
Water separation ability		seconds	< 100	DIN 51589-1
Air separation ability	at 50°C	minutes	3	DIN ISO 9120
Corrosion protection on steel	method A, B		passed	DIN ISO 7120
Corrosivity on copper	3 h at 100°C	corr. level	1	DIN ISO 2160
Ageing behaviour (TOST)	time remaining until the increase of NN by 2.0 mg KOH / g	hours	> 10,000	DIN EN ISO 4263-1
FZG Four square gear oil tester (A/8.3/90)		scuffing load stage	≥ 9	DIN 14635-1
Foaming characteristics	at 24°C	ml / ml	< 20 / 0	ASTM D 892
	at 93.5°C	ml / ml	< 20 / 0	
	at 24°C after 93.5°C	ml / ml	< 20 / 0	

ADDINOL - The Experts for High-Performance Lubricants

We at ADDINOL develop and produce more than 600 high-performance lubricants of the new generation. Among these are automotive lubricants for highest demands and pioneering developments for industrial applications. Our customers all over the world benefit from the high and stable quality of our ADDINOL high-performance lubricants, our know-how and the individual customer advisory service of our competent experts. Our company has world wide activities. ADDINOL high-performance lubricants are distributed by more than 90 international partners.

The data given in this product sheet represent our current level of knowledge and experience. Due to the various specific application they do, however, not discharge the user from his own examination. The information provided herein may not be used to derive a legally binding warranty of specific properties or the suitability for a certain purpose of application. Detailed security-concerning and toxicological data as well as security instructions for each product can be taken from the corresponding Material Safety Data Sheets (MSDS). High-performance lubricants from ADDINOL are under continuous development. Therefore, ADDINOL Lube Oil GmbH keeps the right to change technical data in this product data sheet without notification. In case of doubt, please do not hesitate to contact our customers' advisory service.