



TURBINE OILS

ADDINOL TURBINES OIL TL 32, 46, 68

PRODUCT DESCRIPTION

ADDINOL Turbine oils TL are based on high quality mineral oil raffinates. They contain a zinc-free additive combination, which guarantees corrosion protection and outstanding ageing behaviour.

APPLICATION

- Preferably applied in steam, gas and water turbines as well as in turbo compressors with normal thermal load
- Excellent suitability for the lubrication and cooling of bearings
- Very well applicable as pressure transfer agents for controlling and regulating devices
- Application in large and industrial power plants

PLEASE NOTE

According to the operating conditions, oil change intervals of more than 100,000 h can be achieved.

For turbine devices with gears, which demand a turbine oil with increased load scuffing capacity (FZG \geq 8), the product line ADDINOL Turbine oils TP is available.

SPECIFICATIONS/APPROVALS

Meet and surpass the requirements of:

- DIN 51515-1 (L-TD)

Viscosity grade corresponds to:

- ISO classification 3448
- DIN 51519

Approved and accepted according to:

- Siemens
- Voith Turbo
- Alstom Power
- Doosan Škoda Power
(Turbine Oil TL 32, TL 46)

DELIVERY

Delivery preferable in IBCs and drums.

CHARACTERISTICS

- Zinc-free
- Excellent water and air separation
- Very good ageing stability
- Outstanding corrosion protection against steel and non-ferrous metals

ADVANTAGES AND BENEFITS

- Does not form deposits
- Easy separation of infiltrated water
- Avoids emulsification
- Quick separation of entrained air
- Extremely long oil change intervals
→ low operating costs
- Very good protection of critical device parts with enhanced operational safety





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SPECIFICATIONS AND TYPICAL PARAMETERS

Features	Test condition / unit		TL 32	TL 46	TL 68	Method acc. to
ISO viscosity grade			32	46	68	DIN 51519
Density	at 15°C	kg/m ³	850	860	860	DIN 51757
Viscosity	at 40°C	mm ² /s	31.4	47.5	66.3	ASTM D 7042
	at 100°C	mm ² /s	5.7	7.5	9.2	
Flash point	COC	°C min.	225	250	260	DIN EN ISO 2592
Pour point		°C max.	-10	-12	-15	ASTM D 7346
Neutralisation number		mg KOH / g	< 0.15			DIN 51558-1
Content of water		mg / kg	< 100			DIN 51777-1
Water separation ability		seconds	< 150		< 200	DIN 51589-1
Air separation ability	at 50°C	minutes	< 3	< 4	< 6	DIN ISO 9120
Corrosion protection on steel	method A and B		passed			DIN ISO 7120
Corrosivity on copper	100°C, 3h	corr.level	1			DIN ISO 2160
Ageing behaviour (Life TOST)	Time for of NN to increase by 2.0 mg KOH / g	hours	> 10,000			DIN EN ISO 4263-1
Foaming characteristic	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.