Product Information

RENOLIN ETERNA
Turbine Oils according to DIN 51 515

Description

RENOLIN ETERNA turbine oils were developed for gas, steam, and expansion turbines as well as for turbo compressors with and without gearboxes based on the latest lubrication technology.
The excellent properties of the base oils produced in a special process are enhanced using a carefully selected additive system. RENOLIN ETERNA oils contain no metallorganic compounds and are therefore ashless. They provide a zinc-free wear protection.

Application

RENOLIN ETERNA is especially suited for use in turbine systems with a common control and lubricating oil circuit. It can also be used as a bearing and sealing oil in hydrogen-cooled generators.

Specifications

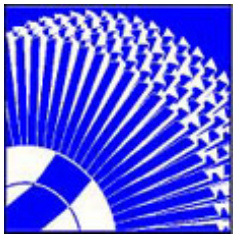
RENOLIN ETERNA 32/46 are approved by:
Siemens Power Generation

The RENOLIN ETERNA range also meets and in many cases exceeds the requirements of:

- DIN 51 515-1 (TD) with and without gearbox
- DIN 51 515-2 (TG) with and without gearbox
- GE GEK 28568 A
- GE GEK 32568 F
- GE GEK 101941 A
- GE GEK 107395 A
- Siemens TLV 901304
- Solar ES 9-224 (Class I / Class II)
- MIL-PRF-17331 J

Advantages / Benefits

- **High thermal stability**
- **Good viscosity-temperature behaviour**
- **Rapid air release**
- **No foaming**
- **Low pourpoint**
- **Good wear protection**
- **Excellent corrosion protection**
- **Good water separation behavior**



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Typical Technical Data:

Product name		**32**	**46**	**68**	
Property	**Unit**				**Test method**
ISO VG		32	46	68	DIN 51 519
Colour	-	0.5	1.0	1.0	DIN ISO 2049
Density at 15°C	G/ml	0.842	0.846	0.870	DIN 51 757
Kinematic Viscosity at 40°C at 100°C	 mm²/s mm²/s	 32 5.8	 46 7.6	 68 9.0	DIN EN ISO 3104
Flashpoint	°C	220	218	230	DIN ISO 2592
Pourpoint	°C	-15	-15	-15	DIN ISO 3016
Foaming Sequ. I Sequ. II Sequ. III	 ml ml ml	 30/0 20/0 10/0	 30/0 20/0 10/0	 40/0 50/0 40/0	ASTM D 892
Neutralisation number	mgKOH/g	0.15	0.15	0.15	DIN 51 558-2
FZG mechanical gear test rig FZG A/8,3/90	Failure load stage	$\geq$10	>10	>10	DIN ISO 14635-1
Air release at 50°C	min	$\leq$ 4	$\leq$ 4	$\leq$ 6	DIN ISO 9120
WAV-Test	s	< 50	< 60	< 100	DIN 51 589
Demulsifying power at 50°C	Min	10	10	10	DIN ISO 6614
Steel corrosion (corrosion protection)	Degree of corr.	0-A 0-B	0-A 0-B	0-A 0-B	DIN ISO 7120
Corrosion effect with Cu	Degree of corr.		1-100 A24		DIN EN ISO 2160
RPVOT 150° C	min	> 1.000	> 1.000	> 1.000	ASTM D2272
TOST Lifetime	h	> 10.000	> 10.000	> 10.000	DIN 51 587

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