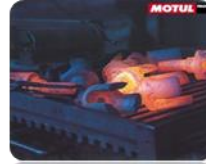


## LUBRICATION



### SAFROTATE Turbine oils

#### DESCRIPTION

**SAFROTATE** are premium ashless lubricants for the lubrication of gas, water and steam turbines as well as turbo compressors.

#### ADVANTAGES

- High oxidation and good thermal stability, excellent hydrolytic stability
- Anti-wear and extreme pressure (EP) performance
- Prevents sludge formation
- Good protection against corrosion of ferrous and non-ferrous metals
- Very low acid number
- Good demulsifying and foam behavior

#### SPECIFICATIONS

**SAFROTATE** meets the following standards:

- Fives Cincinnati P-38 (ISO VG 32), P-55 (ISO VG 46), P-54 (ISO VG 68)
- General Electric GEK 32568, GEK 107395, GEK 46506
- Siemens TLV 9013 04
- Alstom HTGD 90 117
- Solar Turbines ES9-224
- DIN 51524-1; 51515-1
- Parker Denison HF-0 Bench Tests
- AIST 125
- ISO 8068
- AGMA 9005 E02-RO

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Creation date: 2013/11/06  
Revision date: 2018/03/26

## LUBRICATION



### SAFROTATE Turbine oils

#### FIELDS OF USE

- Heavy duty industrial gas turbines
- Centrifugal machine, rotor or screw compressors, vane pumps, centrifugal pumps
- All type of lightly loaded gearboxes light load, vacuum pumps, conveyors, electric motors, low or medium pressure hydraulic systems that do not require wear resistance

#### PROPERTIES

Characteristics	Method	Unit	SAFROTATE 32	SAFROTATE 46	SAFROTATE 68
Specific Gravity (at 20 °C)	ASTM D4052	Kg/l	0.856	0.854	0.860
Viscosity at 40 °C	ASTM D445	cSt	32	46	68
Viscosity at 100 °C	ASTM D445	cSt	5,6	7,2	9,3
Viscosity Index	ASTM D2270	-	118	117	113
Flash point	ASTM D92	°C	224	228	234
Pour point	ASTM D97	°C	-38	-35	-32
Colour	ASTM D1500		1.0	1.0	1.0

*The specifications of our products only become definitive at the time of order, which is subject to our general sale and guarantee conditions. The general characteristics of our products may change to provide our customers with the benefits of technical developments. The safety data sheet of this product is available on [www.motul.com](http://www.motul.com).*

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