

## Description

In order to comply with the stringent demands of the different turbine manufacturers, a type of lubricant that, attaining excellent values, complies with various rapid oxidation tests such as IP-280, ASTM-D-2272 and IP-328, as well as exceeding 4000 h in the conventional ASTM-D-943 test. Furthermore, these oils have passed radiation exposure tests, obtaining certification for use in nuclear power plants. They are specially recommended for nuclear and thermal power plant steam turbines requiring oils inhibited against oxidation, rust and with an extended service life. They can also be applied in all uses of Aries lubricants, obtaining greater durability.

## Properties

- Extraordinary resistance to ageing and sludge formation.
- High resistance to rust.
- Great water separation capacity.
- Excellent anti-foam properties.
- Very good air elimination.
- Used by most turbines installed in Spain.

## Quality levels

- DIN-51515 Part 1 L-TD
- DIN-8659 Part 2
- DIN-51517 Part 2 CL
- ISO 3498 (1986) CKB
- DIN-51506 VBL and VCL
- ISO 6743 Part 3 DAA
- The EP type is MIL L-17331 H
- It also complies with specifications: ABB, SIEMENS, WESTINGHOUSE, AEG, ALSTHOM, SULZER, KKK, GE, etc.

## Technical specifications

	UNIT	METHOD	VALUE			
ISO Viscosity Grade			<b>32</b>	<b>46</b>	<b>68</b>	<b>EP</b>
Viscosity at 40 °C	cSt	ASTM D 445	32	46	68	80
Viscosity at 100 °C	cSt	ASTM D 445	5.4	6.8	8.5	9.6
Viscosity index		ASTM D 2270	100	98	98	95
Density at 15 °C	g/cm <sup>3</sup>	ASTM D 4052	0.870	0.880	0.880	0.886
Pour point	°C	ASTM D 97	-15	-12	-12	-12
Flash point	°C	ASTM D 92	215	220	230	230
De-emulsification at 54 °C	min	ASTM D 1401	<15	<15	<30	<30
Resistance to rust, A		ASTM D 665	Pass	Pass	Pass	Pass
Aeroemulsion at 50 °C	min	ASTM D 3427	2.5	2.5	4	--
RPVOT	min	ASTM D 2272	750	600	600	--
TAN	mg KOH/g	ASTM D 664	0.14	0.14	0.14	0.15
Oxidation (TAN = 2)	hr	ASTM D 943	>4000	>3000	>3000	>1000

A safety data sheet is available on request.

repsol.com  
+34 901 111 999

Technical data sheet for Lubricants. Revision 6. September 2013.