

Lubricants for industry.



## Turbine EP

Recommended lubricant for steam and gas turbines, and combined cycle power plants, when extreme pressure characteristics are required.

### Use

- Product formulated with bases treated with high-pressure hydrogen and selected additivation that give it excellent properties for different applications, with extreme pressure characteristics.
- Specially designed for combined cycle power plants in the lubrication of steam and gas turbines, and special turbogenerators with gears-reducer units.
- It can also be used in hydraulic systems that require high-quality hydraulic oil and extreme pressure characteristics.

### Benefits

- Excellent thermal stability. Prevents the physical or chemical deterioration of the load during use.
- Excellent corrosion and oxidation protection.
- Excellent resistance to foam formation and air release.
- Compatibility with traces of other types of turbine oils.
- Its high performance allows for a longer service life, achieving longer oil load change intervals, and reducing maintenance stoppage costs.

### Specifications

• ISO 6743-5 L TSA/TSE/TGA/TGB/TGE	• ALSTOM HTGD 90117	• GENERAL ELECTRIC GEK 101941A
• GENERAL ELECTRIC GEK 107395A	• GENERAL ELECTRIC GEK 27070	• SIEMENS TLV 901304
• GENERAL ELECTRIC GEK 46506D	• GENERAL ELECTRIC GEK 32568F	• MAN TURBO SPD 10000242284
• SOLAR ES 9-224W	• MAN ENERGIE ME-TTS 011/18/92	• DIN 51515 Part II (L-TG)
• SIEMENS MAT 812109 (ISO 46)		

### Physical and chemical properties

Parameter	Units	Method	Turbine EP	
<b>ISO Grade</b>	-	-	<b>32</b>	<b>46</b>
Density 15°C, kg/l	Kg/l	ASTM D-4052	0.865	0.868
Flash point V/A, °C	°C	ASTM D-92	218	220
Pour Point, °C	°C	ASTM D-5950	<-12	<-12
Viscosity 40°C, cSt	cSt	ASTM D-445	32	46
Viscosity index	-	ASTM D-2270	108	106
FZG, Fault stage	-	DIN 51354	9	9
Air release	minutes	DIN 51381	<4	<4
RPVOT	minutes	ASTM D-2722	>2500	>2500
TOST	hours	ASTM D-943	>10,000	>10,000

### Health & safety and environment

A Material Safety Data Sheet providing information on product hazards, handling precautions, first aid measures, and relevant environmental data is available for this product as per applicable legislation.

The typical values of the characteristics appearing in the table are average values given for guidance purposes only and do not constitute a guarantee. These values may be modified without any prior warning.