

Product	Sinopec L-TSE/LF Long Service Life Extreme Pressure Turbine Oil
Summary	<p>Product description</p> <p>Sinopec L-TSE/LF Long Service Life Extreme Pressure Turbine Oil is a line of products formulated with high-quality hydrogenated base oils and selective additives. Excellent extreme pressure, antiwear and oxidation stability properties enable this product to be used as a long service life turbine oil in turbines with gear reduction units, industrial drive units and control systems. Available in three ISO viscosity grades: 32, 46.</p>

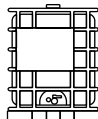
Available sizes



PAIL – 18L



DRUM – 200L



IBC – 1000L

Also available in bulk

Applications

Sinopec L-TSE/LF Long Service Life Extreme Pressure Turbine Oil is suitable for use in:

- Gas/steam combined power generation units.
- Turbines fitted with gear reduction devices.
- Industrial drive units.
- Marine turbines.

Features and benefits

- Excellent extreme pressure and antiwear performance protect gears and bearings operating under high loads or shock-loading conditions, extending equipment life and reducing maintenance costs.
- Excellent oxidation stability ensures long oil service life and reduces the costs associated with equipment down time and maintenance.
- Excellent control of sludge, deposits and varnish prevents servo-valve sticking and blocking, ensures smooth operation and extends oil service life.
- Excellent rust and corrosion prevention properties protect equipment from rusting and corrosion, and extend equipment life.
- Good air release properties protect against air entrainment, ensure optimum oil film thickness and protect equipment components from cavitation.
- Good antifoaming properties avoid the build up of foam, and reduce oil leakage from the system.
- Excellent water separation properties ensure that any water contamination can be easily separated from the oil, protecting equipment against rusting and corrosion and extending oil life.

Product Data Sheet

Typical data

ISO viscosity grade	32	46
Kinematic viscosity of base oil, ASTM D 445		
cSt @ 40°C	31.91	46.27
cSt @ 100°C	5.875	7.312
Viscosity index of base oil, ASTM D 2270	130	120
Air release at 50°C, min, ASTM D 3427	1.6	2.5
Foaming characteristics, sequences 1, 2 and 3, ASTM D 892	15/0 15/0 15/0	30/0 30/0 20/0
Demulsibility @ 54°C, time to 3 ml emulsion, min, ASTM D 1401	5	5
Neutralisation number, mg KOH/g, ASTM D 974	0.14	0.14
Oxidation stability, time to 2 mg KOH/g, hours, ASTM D 943	>10,000	>10,000
Oxidation stability, RPVOT @ 150°C, min, ASTM D 2772	1000	950
Rust prevention, ASTM D 665		
synthetic sea water	pass	pass
Copper corrosion, 3 hours @ 100°C, ASTM D 130	1b	1b
FZG gear test, pass level, ASTM D 5182	10	10
Pour point, °C, ASTM D 97	-16	-16
Flash point (COC), °C, ASTM D 92	237	252
Density @ 15°C, kg/l, ASTM D 4052	0.8449	0.8523

These data are given as an indication of typical values and not as exact specifications.

Industry and OEM specifications

Sinopec L-TSE/LF Long Service Life Extreme Pressure Turbine Oil meets the performance requirements of the following industry specifications:	
ASTM	4304 Rev A Type II
DIN	51515 L-TD(EP)
DIN	51515 L-TG(EP)
GB ¹	11120-2011 (L-TSE, L-TGE)
ISO	8068(L-TSE, L-TGE)

¹ Note: 'GB' standards are the National Standards of the People's Republic of China.

Product Data Sheet

Sinopec L-TSE/LF Long Service Life Extreme Pressure Turbine Oil meets the performance requirements of the following OEM specifications:	
Alstom Power	HTGD 90117 (EP)
GE	GEK-107395a
Siemens Power Generation	TLV 9013 04 (EP)
Siemens Power Generation	TLV 9013 05 (EP)
Siemens Industrial Turbomachinery AB	MAT812108(ISO VG32), MAT812109(ISO VG46)
Ansaldo Energia	TGO2-0171-E00000/C(EP)
Sinopec L-TSE/LF Long Service Life Extreme Pressure Turbine Oil holds the following formal OEM approvals:	
Alstom Power	HTGD 90117(EP) (ISO VG 46)
Siemens Power Generation	TLV 9013 04(EP) (ISO VG 32/46)
Siemens Power Generation	TLV 9013 05(EP) (ISO VG 32/46)
MAN Diesel & Turbo	TED 10000494596 (ISO VG 46)
Ansaldo Energia	TGO2-0171-E00000/C(EP) (ISO VG 32/46)

Accuracy of information

Data provided in this PDS is typical and subject to change as a result of continuing product research and development. The information given was correct at the time of printing. The typical values given are subject to variations in the testing procedures and the manufacturing process may also result in slight variations. Sinopec guarantees that its lubricants meet any industry and OEM specifications referred to on this data sheet.

Sinopec cannot be held responsible for any deterioration in the product due to incorrect storage or handling. Information on best practice is available from your local distributor.

Product and environmental safety

This product should not cause any health problems when used in the applications suggested and when the guidance provided in the Material Safety Data Sheet (MSDS) is followed. Please consult the MSDS for more detailed advice on handling; MSDSs are available from your local distributor. Do not use the product in applications other than those suggested.

As with all products, please take care to avoid environmental contamination when disposing of this product. Used oil should be sent for reclamation/recycling or, if not possible, must be disposed of according to relevant government/authority regulations.

The SINOPEC trademark is registered and protected.

Issued: March 2017

© Sinopec 2017

Sinopec L-TSE/LF Long Service Life EP Turbine Oil