

Product	Sinopec L-CKT Heavy Duty Industrial Gear Oil (Fully Synthetic)
Summary	Product description Sinopec L-CKT Heavy Duty Industrial Gear Oil (Fully Synthetic) is formulated with high-quality polyalphaolefin (PAO) base oil and an advanced multifunctional additive system. Superior in quality to mineral oil-based products, it offers outstanding performance and long oil life in severe heavy-duty enclosed industrial gear oil applications. Available in five ISO viscosity grades: 150, 220, 320, 460 and 680.

Applications

Sinopec L-CKT Heavy Duty Industrial Gear Oil (Fully Synthetic) is suitable for use in:

- Heavy-duty enclosed industrial gear units and other gears under high vibrational load, such as those used in the steel, pulp and paper, mining, power and cement industries.
- Enclosed industrial gearboxes operating at very high or very low temperatures, or operating continuously at higher than normal operating temperatures.
- Gearboxes that are difficult to access, and so require a long life gear oil.
- Industrial gears supplied by oil circulating systems or splash lubrication systems.

Features and benefits

- Excellent extreme pressure and antiwear performance, protects gears even when under heavy- or shock-loaded conditions.
- Excellent thermal and oxidation stability, together with good detergency properties, ensures the oil does not break down or form sludge or deposits at high temperatures, extending oil life and protecting high-precision equipment.
- High viscosity index and very low pour point provide outstanding high and low temperature performance and ensure excellent protection, even in severe temperature conditions.
- Longer oil life compared to conventional mineral oil-based gear oils, allows extended oil drain intervals and reduces operating costs.
- Very good anticorrosion properties protect against rust and corrosion, and extend component life.
- Excellent lubricity and low coefficient of friction of the PAO base oil, provide significant reduction in power consumption in many gear drives, and reduced bulk oil/system temperatures.

Product Data Sheet

Typical data

Sinopec L-CKT Heavy Duty Industrial Gear Oil (Fully Synthetic)					
ISO viscosity grade	150	220	320	460	680
Kinematic viscosity, ASTM D 445					
cSt @ 40°C	147.60	219.50	314.20	433.90	655.5
cSt @ 100°C	19.26	25.31	34.10	44.74	60.79
Viscosity index, ASTM D 2270	149	145	152	159	161
FZG, pass load stage, DIN 51354	12+	12+	12+	12+	12+
Timken OK load, lb, ASTM D 2782	65	65	65	65	65
Four ball wear, 60 mins @ 392 N, mm, ASTM D 4172	0.34	0.32	0.33	0.34	0.35
Four ball EP, weld load, kg, ASTM D 2783	315	315	315	315	315
Rust prevention, synthetic sea water, ASTM D 665B	pass	pass	pass	pass	pass
Copper corrosion, 3 hours @ 100°C, ASTM D 130	1b	1b	1b	1b	1b
Foaming characteristics, sequences 1, 2 and 3, ASTM D 892	0/0 10/0 0/0	0/0 10/0 0/0	0/0 10/0 0/0	0/0 20/0 0/0	0/0 10/0 0/0
Demulsibility (82°C), ASTM D 2711 water in oil test, % emulsion layer, ml separated water content, ml	1.0 0.3 84.0	0.8 0.4 83.0	1.0 0.4 84.3	0.8 0.5 84.0	1.2 0.6 82.5
Pour point, °C, ASTM D 97	-43	-43	-40	-33	-30
Flash point (COC), °C, ASTM D 92	248	248	252	258	265
Density @ 20°C, kg/l, ASTM D 4052	0.8535	0.8484	0.8525	0.8520	0.8601

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

Industry and OEM specifications

Sinopec L-CKT Heavy Duty Industrial Gear Oil (Fully Synthetic) meets the performance requirements of the following industry specifications:	
AIST (US Steel)	224
ANSI/AGMA	9005-E02 (S)
DIN	51517 CLP-HC (Part 3)
ISO	12925-1 L-CKT

Product Data Sheet

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.

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