Product Data Sheet

SINOPEC PERFORMANCE IN MOTION

Product

Sinopec 4408 Fully Synthetic Heavy Duty Industrial Gear Oil

Summary

Product description

Sinopec 4408 Fully Synthetic Heavy Duty Industrial Gear Oil is formulated with high-quality poly-alpha-olefin (PAO) base oils and a multifunctional additive system. In addition to offering the performance of traditional heavy-duty industrial gear oil, this product protects against micropitting and scuffing of gear teeth, ensures long oil life and is particularly suitable for the severe lubrication requirements of gearboxes found in wind turbines used in power generation. Available in five ISO viscosity grades: 150, 220, 320, 460 and 680.

Also available in bulk

Available sizes



Applications

Sinopec 4408 Fully Synthetic Heavy Duty Industrial Gear Oil is suitable for use in:

- Gearboxes in wind turbines, in onshore and offshore applications, which run under severe conditions of high torque, heavy or shock-loading, wide ambient temperature range, corrosive (sea water) environment, constant stopping and starting, and poor accessibility for relubrication.
- Industrial gears found in other heavy-duty applications, such as equipment used in the steel, pulp and paper, mining, power and cement industries.

Features and benefits

- Excellent antiwear performance protects against micropitting and scuffing of gear teeth, reducing the risk of premature failure of the gear surfaces, and provides extended bearing life under extreme operating conditions.
- High viscosity index and low pour point provide excellent low- and high-temperature performance in applications where there are extreme ambient temperatures, ensuring smooth start up and operation of gears.
- Excellent oxidation stability prevents oil breakdown at high temperatures, prolonging oil service life, allowing increased time between drain intervals, and reducing maintenance costs.
- Good anticorrosion properties, together with good water separability, protect against rust and copper corrosion, extending component life.
- Excellent lubricity and low traction coefficient provide significant reduction in power consumption in many gear drives, and reduced bulk oil/system temperatures.



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Typical data

Sinopec 4408 Fully Synthetic Heavy Duty Industrial Gear Oil						
ISO viscosity grade	150	220	320	460	680	
Kinematic viscosity, ASTM D 445						
cSt @ 40℃	155.0	212.8	326.6	473.2	670.8	
cSt @ 100℃	20.08	25.59	35.08	46.76	59.10	
Viscosity index, ASTM D 2270	150	152	153	156	153	
Pour point, °C, ASTM D 97	-46	-43	-40	-38	-34	
Flash point (COC), °C, ASTM D 92	242	255	244	254	253	
Copper corrosion, 3 hours @ 100℃, ASTM D 130	1b	1b	1b	1b	1b	
Rust prevention, synthetic sea water, ASTM D 665B	pass	pass	pass	pass	pass	
Foaming characteristics, sequences 1, 2 and 3, ASTM D 892	0/0 0/0 0/0	0/0 0/0 0/0	0/0 0/0 0/0	0/0 0/0 0/0	0/0 0/0 0/0	
Demulsibility (82°C), ASTM D 2711 water-in-oil test, % emulsion layer, ml separated water content, ml	0.5 0.2 85.5	0.4 0.1 86.1	0.5 0.2 84.5	0.6 0.3 86.2	0.8 0.4 84.5	
Four ball EP, ASTM D 2783 weld load, kg load wear index, kgf	315 55	315 57	315 58	315 57	315 58	
FZG scuffing test, fail load stage A/8.3/90, DIN 51354	12+	12+	12+	12+	12+	
Density @ 20°C, kg/l, ASTM D 4052	0.8578	0.8650	0.8682	0.8502	0.8612	

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

Industry and OEM specifications

Sinopec 4408 Fully Synthetic Heavy Duty Industrial Gear Oil meets the performance requirements of the following industry specifications:

AIST (US Steel)	224
ANSI/AGMA	9005-E02 (EP)
DIN	51517-3 (CLP)
ISO	12925-1 L-CKT
Flender	BA 7300



The information contained herein is subject to change without notification due to continuing research & development therefore properties may be subject to slight variations.

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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.

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