

# **Product Data Sheet**

#### Product

#### Sinopec 4506 Synthetic Compressor Oil

Summary

#### Product description

Sinopec 4506 Synthetic Compressor Oil is a line of lubricants blended using fully synthetic polyalphaolefin (PAO) base oils and selected additives, including antiwear and extreme pressure (EP) additives and rust and oxidation inhibitors. Designed for use in both rotary (especially centrifugal and screw) and reciprocating air compressor applications, it is available in three viscosity grades: ISO 32, 46 and 68.

# Applications

Sinopec 4506 Synthetic Compressor Oil is suitable for use in:

- Small, medium or large, single- or multi-stage reciprocating or rotary air compressors (especially rotary screw and centrifugal types) in a variety of industries (e.g. the iron, cement, chemical, manufacturing and electronics industries).
- Rotary air compressors where the operating temperature range is between –50°C and 120°C.
- Reciprocating air compressors where the operating temperature range is between -40°C and 200°C (or up to 220°C for short periods).

Caution: not recommended for breathing air compressors.

# Features and benefits

- The synthetic base oil shows outstanding thermal and oxidation stability and low carbon-forming tendency compared with conventional mineral oil-based products, and this leads to good compressor cleanliness, reduced deposits and improved compressor efficiency, even when air discharge temperatures are high (up to 220°C in reciprocating compressors).
- Reduced deposits in discharge lines minimise the risk of fires and explosions.
- Good lubricating and antiwear/EP properties protect moving compressor parts against wear and extend component life.
- · Excellent heat conduction properties reduce the system operating temperature and extend oil life.
- Good anti-rust and anticorrosion properties protect cylinders and discharge valves from rusting and corroding, enhancing equipment life and performance, and prolonging service intervals.
- Good water-separation characteristics ensure that condensed water vapour can easily be separated from the lubricant
  and prevent the formation of emulsions (which could block the oil/air separator (coalescer) in some compressors),
  therefore prolonging coalescer life, and reducing equipment downtime and maintenance costs.
- Improved oil quality leads to longer maintenance and overhaul intervals and extended oil drain intervals (6,000 to 8,000 hours).
- High viscosity index ensures excellent temperature–viscosity properties, and ensures wide operating temperature range.
- Good antifoam properties and compatibility with common seal materials prevent oil leakage from the system during operation.



#### Typical data

Sinopec 4506 Synthetic Compressor Oil			
ISO viscosity grade	32	46	68
Kinematic viscosity, ASTM D 445			
cSt @ 40°C	31.1	46.5	64.7
cSt @ 100°C	5.78	7.68	9.94
Viscosity index, ASTM D 2270	130	133	138
Foaming characteristics, sequence 1, ASTM D 892	0/0	0/0	0/0
Neutralisation number, mg KOH/g, ASTM D 664	0.16	0.20	0.17
Water separability, time to 40/37/3 @ 54°C, minutes, ASTM D 1401	2	5	5
Copper corrosion, 3 hours @ 100°C, ASTM D 130	1b	1b	1b
Conradson carbon residue, %, ASTM D 189	0.02	0.02	0.02
Sulfated ash, wt%, ASTM D 874	0.00	0.00	0.00
Freezing point, °C, ASTM D 97	<-60	-58	-56
Flash point (COC), °C, ASTM D 92	252	260	270
Density @ 15°C, kg/l, ASTM D 4052	0.848	0.850	0.851

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

# Industry and OEM specifications

Sinopec 4506 Synthetic Compressor Oil meets the performance requirements of the following industry specifications:		
ISO	DAJ & DAC	
SHRHYXY	4024–2006	

Sinopec 4506 Synthetic Compressor Oil holds the following OEM approvals:		
ABB Group	Certified	
Wuxi Compressor Company	Certified	

#### 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 in Australia.

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