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|----------------|---|
| Product | Sinopec AP-S Industrial Gear Oils |
| Summary | <p>Product description</p> <p>SINOPEC AP-S Industrial Gear Oils are fully synthetic (PAO) advanced heavy duty industrial gear oil. They provide excellent lubrication protection for gear in the harsh conditions, such as low friction, longer service life and high micro-pitting protection performance, etc.</p> |

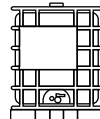
Available sizes



PAIL – 20L



DRUM – 200L



IBC – 1000L



Applications

Sinopec AP-S Industrial Gear Oils are:

- Suitable for lubrication of spur gear, helical gear, bevel gear and bearing of industrial equipment and ship with heavy load and impact load under harsh environment temperature; recommended for applications requiring long service life, little maintenance or very difficult maintenance system.
- Widely applied in steel, coal, electricity, petrochemical, and papermaking areas, such as the reduction gearbox of conveyor, coal mill, extruder, blender mixer, macerater and other heavy equipment industry gearbox.
- Suitable for marine propeller, deck winch, crane, steering gear, etc.; the reducer of excavator, dragline, electric-wheeled self-dumping trucks and other equipment in the open-pit coal mine.

Features and benefits

- Unique anti-micro-pitting ability for gear sets, reducing the risk of premature damage.
- Excellent load carrying capacity and anti-wear properties, minimizing the friction of steel-steel compounds, ensuring trouble-free operation.
- Outstanding thermal property, reduce the formation of oxides at high temperatures. Excellent protection of the gear under severe high or cold temperatures.
- Excellent resistance to corrosion and rust, and very good demulsibility.
- Long service life compared with the conventional industrial gear oil, greatly prolong the maintenance cycle.

Product Data Sheet

Typical data

| Sinopec AP-S Industrial Gear Oils | | | | | |
|---|---------|---------|---------|---------|---------|
| ISO viscosity grade | 150 | 220 | 320 | 460 | 680 |
| Kinematic viscosity, ASTM D 445 | | | | | |
| cSt @ 40°C | 154.2 | 226.5 | 335.6 | 472.1 | 685.4 |
| cSt @ 100°C | 21.86 | 30.69 | 43.66 | 60.65 | 85.02 |
| Viscosity index, ASTM D 2270 | 168 | 178 | 188 | 201 | 212 |
| Pour point, °C, ASTM D 97 | -49 | -46 | -43 | -39 | -36 |
| Flash point (COC), °C, ASTM D 92 | 244 | 252 | 258 | 262 | 265 |
| Copper corrosion, 3 hours @ 100°C, ASTM D130 | 1b | 1b | 1b | 1b | 1b |
| Rust prevention, ASTM D 665 A&B | pass | pass | pass | pass | pass |
| Four ball EP, weld load, N, ASTM D 2783 | 3087 | 3087 | 3087 | 3087 | 3087 |
| Timken OK load, lb, ASTM D 2782 | 60 | 60 | 60 | 60 | 60 |
| FZG scuffing test, fail load stage A/8.3/90, ASTM D5182 | 12+ | 12+ | 12+ | 12+ | 12+ |
| FZG micropitting test, fail stage/GFT class, FVA 54 | 10/high | 10/high | 10/high | 10/high | 10/high |

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

Industry and OEM specifications

| Sinopec AP-S Industrial Gear Oils meets the performance requirements of the following industry specifications: | |
|---|--------------------|
| AIST (US Steel) | 224 |
| ANSI/AGMA | 9005-E02 (EP) |
| DIN | 51517 Part 3 (CLP) |
| ISO | 12925-1 L-CKT |

| Sinopec AP-S Industrial Gear Oils meets the performance requirements of the following OEM specifications: | |
|--|---|
| SIEMENS Flender | T7300 Table A-c (ISO VG 220/320/460/680) |
| GE Specification | D50E35 A/B/C/D/E (ISO VG150/220/320/460/680) |
| Fives Cincinnati | P-77 (ISO VG 150), P-74 (ISO VG 220), P-59 (ISO VG 320), P-35 (ISO VG 460), P-34 (ISO VG 680) |
| Bosch Rexroth | Lube Oil Recommendations Appendix A (ISO VG 220) |

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 Data Sheet

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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