

Product	Sinopec DOT 5.1 Synthetic Brake Fluid
Summary	<p>Product description</p> <p>Sinopec DOT 5.1 Synthetic Brake Fluid is formulated using a blend of synthetic glycol ether and borate ester with selected additives. It meets the requirements of the DOT 5.1 specification to give excellent brake and clutch performance in severe service conditions, such as in racing cars, where braking causes heat generation that could cause vapour lock and brake fade with a lower quality fluid.</p>

Available sizes



1L



DRUM – 200L



IBC – 1000L

Also
available
in bulk

Applications

Sinopec DOT 5.1 Synthetic Brake Fluid is suitable for use in:

- Hydraulic disc, drum and anti-skid brakes and clutch systems of all passenger cars and commercial vehicles that require a DOT 5.1 DOT 4 or DOT 3 - assuming they are all compatible as all are glycol ether/borate ester mixes performance synthetic fluid.
- Racing brake systems in high-performance racing cars.

Caution: do not use where a mineral oil-based fluid or a DOT 5 silicone-based fluid is required.

Features and benefits

- Higher wet and dry equilibrium reflux boiling point (ERBP), when compared to DOT 4 or DOT 3 fluids, minimises vapour formation on braking at very high-speed or very high-load conditions and maintains the fluid's hydraulic properties, thus ensuring good braking performance even in severe service conditions.
- Borate ester in the formulation acts as a water scavenger and helps to maintain the ERBP during service, so maintaining the quality of braking performance as the fluid ages.
- Excellent fluidity, even at low temperatures, enables optimum braking performance.
- A buffered alkaline pH protects iron and steel-containing system components from acidic corrosion, ensuring long component life.
- Selected corrosion inhibitors protect aluminium, copper, zinc and tin-containing system components from corrosion, ensuring long life.
- Good compatibility with common seal materials used in braking systems minimises fluid leakage and reduces component wear caused by inadequate lubrication, ensuring good braking performance.
- Excellent thermal and oxidation stability properties prevent fluid breakdown and deposit formation, maximising fluid life and performance.
- Fully compatible with other brake fluids that meet the DOT 5.1, DOT 4 and DOT 3 specifications.

Typical data

Sinopec DOT 5.1 Synthetic Brake Fluid	
Equilibrium reflux boiling point (ERBP), °C, ISO 4925	265
Wet ERBP, °C, ISO 4925	184
Kinematic viscosity, ISO 4925	
cSt @ -40°C	810
cSt @ 100°C	2.055
pH, ISO 4925	7.8
Corrosion, 120 h @ 100°C, mass change of metal strips, mg/cm ² , ISO 4925	
tinned iron	0.00
steel	0.00
aluminium	0.00
cast iron	0.00
brass	0.03
copper	0.04
zinc	0.02
Effect on rubber, ISO 4925	Pass
styrene butadiene rubber (SBR) @ 120°C	
cup diameter increase, mm	0.78
hardness change, IRHD	7
ethylene propylene diene monomer (EPDM) @ 120°C	
volume change, %	3.80
hardness change, IRHD	4

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

Industry and OEM specifications

Sinopec DOT 5.1 Synthetic Brake Fluid meets the performance requirements of the following industry specifications:	
FMVSS No. 116	DOT 5.1
GB ¹	12981-2012 HZY5
ISO 4925	Class 5

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

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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