

Product	Sinopec HP-R Grease
Summary	<p>Product description</p> <p>Sinopec HP-R Grease is an extreme pressure, heavy-duty wheel bearing and chassis grease, formulated with a lithium complex soap thickener and high-quality mineral base oil. It contains rust and oxidation inhibitors, EP and antiwear additives to ensure excellent performance and long life, even in severe service conditions such as high temperatures, shock loading and where water contamination is possible.</p>

Applications

Sinopec HP-R Grease is suitable for use in:

- Automotive wheel bearings, particularly those operating under the high-temperature, high-load conditions that are caused by braking at high speed.
- General lubrication of chassis points (e.g. shackles, tie rod ends, steering knuckles, control arms and king pins), electric motors and water pumps of passenger cars, buses and trucks.

Features and benefits

- Excellent extreme pressure and antiwear properties protect heavily loaded or shock-loaded bearings from wear, extending equipment life.
- Lithium complex soap thickener ensures a high dropping point, which means that the grease can be used at higher temperatures in severe service applications (operating temperature range is from -30°C to $+180^{\circ}\text{C}$), and also confers excellent mechanical stability so that the grease structure does not break down in service.
- High-quality base oil ensures a good oil film thickness is maintained, even in high-temperature applications, protecting components against wear.
- Excellent water resistance means that the grease stays in place and is not washed or sprayed off in wet conditions, reducing the need for frequent re-application.
- Excellent protection against rusting and corrosion ensures long component life, and extends maintenance intervals.
- Good thermal and oxidation stability ensure longer grease life under high-temperature conditions, providing optimum lubrication, extending equipment life and reducing maintenance requirements.
- Suitable consistency meets the requirements of wheel bearing application, and avoids the grease being flung out of the bearing by centrifugal forces, so ensuring longer relubrication intervals.

Typical data

Sinopec HP-R Grease	
NLGI grade	2–3
Appearance, visual	Smooth, blue, buttery
Thickener type	Lithium complex
Base fluid type	Mineral

Product Data Sheet

Cone penetration, ASTM D 217	
W _{x60} , mm ⁻¹	253
W _{x100,000} , % change from W _{x60}	16
Dropping point, °C, ASTM D 2265	296
Oil separation, 24 h @ 100°C, %, FTMS 791C-321.3	0.3
Four ball wear, 60 min @ 392 N, mm, ASTM D 2266	0.50
Timken OK load, N, ASTM D 2509	178
Water washout, 1 h @ 79°C, %, ASTM D 1264	1
Oxidation stability, 100 h @ 99°C & 758 kPa, pressure drop, kPa, ASTM D 942	21
Car wheel bearing test (accelerated) 20 h @ 160°C, leakage, g, ASTM D 4290	1.3
Corrosion prevention, 48 h @ 52°C, rating, ASTM D 1743	pass
Copper corrosion, T2 copper strip, 24 h @ 100°C, rating, ASTM D 4048	pass

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

Industry and OEM specifications

Sinopec HP-R Grease meets the performance requirements of the following industry specifications:	
Sinopec	Q/SH PRD131-2008

Sinopec HP-R Grease holds the following formal OEM approvals:	
Foshan Yonglilai Axle Co., Ltd	Approved for use as an automotive wheel bearing grease
Liaoning Shuguang Automotive Co., Ltd	Approved for use as an automotive wheel bearing grease
Shandong Huali Motor Co., Ltd	Approved for use as an automotive wheel bearing grease

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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