

<b>Product</b>	<b>Sinopec Extreme Pressure Lithium Complex Grease</b>
<b>Summary</b>	<b>Product description</b> Sinopec Extreme Pressure Lithium Complex Grease is an extreme pressure 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. Available in NLGI grades 1, 2 and 3.

## Applications

Sinopec Extreme Pressure Lithium Complex Grease is suitable for use in:

- Bearings operating under high loads or shock loads and at high temperatures, for example in the metallurgical industry, where an extreme pressure grease is required.
- Other high-temperature grease applications, for example in the dyeing and printing industries.
- Oil pump bearings of high capacity cars, running at high temperatures.
- Applications where the temperature range is from  $-20^{\circ}\text{C}$  to  $+160^{\circ}\text{C}$ .

## 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 ( $-20^{\circ}\text{C}$  to  $+160^{\circ}\text{C}$ ), 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.
- Available in NLGI grades 1, 2 and 3 to meet the requirements of specific applications.

# Product Data Sheet

## Typical data

<b>Sinopec Extreme Pressure Lithium Complex Grease</b>			
NLGI grade	1	2	3
Appearance, visual	Smooth, brown, buttery		
Thickener type	Lithium complex		
Base fluid type	Mineral		
Kinematic viscosity, ASTM D 445			
cSt @ 100°C (range)	10–13	10–13	10–13
Cone penetration, ASTM D 217			
W×60, mm <sup>-1</sup>	318	289	242
W×100,000, % change from W×60	8.49	7.27	8.26
Dropping point, °C, ASTM D 2265	282	300	297
Oil separation, 24 h @ 100°C, %, FTMS 791C-321.3	4.6	2.1	0.0
Apparent viscosity, -10°C, 10 s <sup>-1</sup> , Pas, GOST 7163	210	336	685
Water washout, 1 h @ 38°C, %, ASTM D 1264	–	0	–
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	pass	pass
Oxidation stability, 100 h @ 99°C & 758 kPa, pressure drop, kPa, ASTM D 942	13	16	36
Timken OK load, N, ASTM D 2509	–	156	156
Four ball EP, weld load P <sub>D</sub> , N, ASTM D 2596	–	3,089	3,089
Four ball EP, load-wear index, ASTM D 2596	–	459	443

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

## Industry and OEM specifications

<b>Sinopec Extreme Pressure Lithium Complex Grease meets the performance requirements of the following industry specification:</b>	
Sinopec	SH/T 0535 93-2003

<b>Sinopec Extreme Pressure Lithium Complex Grease holds the following formal OEM approval:</b>	
Neimenggu Huolinhe Weather Coal Co., Ltd	Approved for use in crushers

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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.

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