

Product	Sinopec Premium Mining Grease
Summary	Product description Sinopec Premium Mining Grease is a super-high performance extreme pressure grease designed for extra heavy-duty off-road and mining applications. Formulated with an advanced lithium complex soap thickener and high viscosity hydrotreated base oil, it is available in NLGI 1 and NLGI 2 grades. It contains rust and oxidation inhibitors, EP and antiwear additives to protect against wear under shock loading conditions, as well as 4% solids, which provide additional wear protection especially under the severe vibrating or oscillating conditions that are found in many severe mining applications. This grease has exceptional 'staying power' under extreme operating conditions, and shows excellent resistance to water washout and spray-off, ensuring extended service life.

Applications

Sinopec Premium Mining Grease is suitable for use in:

- Off-road equipment used in the mining industry, particularly to lubricate slow-moving plain and rolling element bearings under severe conditions of very high loads, shock loading and vibrating or oscillating conditions.
- Heavy duty construction, earthmoving, mobile and stationery equipment, especially in those applications operating under very high loads, shock loading and vibrating or oscillating conditions.
- Some heavy duty applications that are difficult to access, and for which long lubrication intervals are required.
- Bucket pins, pivot pins and heavily loaded chassis components.
- General purpose chassis lubrication.

Features and benefits

- Excellent extreme pressure and antiwear properties protect heavily loaded or shock-loaded bearings from wear, extending equipment life.
- High level of solid molybdenum disulfide provides an additional measure of residual lubrication, which protects metal surfaces against wear in applications where vibrating or oscillating movement tends to squeeze out the grease from between metal surfaces.
- Lithium complex soap thickener ensures a high dropping point (c. 270°C), which means that the grease can be used at higher temperatures in severe service applications (operating temperature range is from -10°C to +150°C), and also confers excellent mechanical stability so that the grease structure does not break down in service.
- High viscosity hydrotreated base oil ensures a good oil film thickness is maintained even under severe high-temperature conditions, 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 and ensuring optimum lubrication and protection even in hostile working environments.
- Excellent protection against rusting and copper 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 two NLGI grades; the NLGI grade 1 product may be used in centralised lubrication systems where good pumpability is required.

Typical data

Sinopec Premium Mining Grease		
NLGI grade	1	2
Appearance, visual	Black	Black
Thickener type	Lithium complex	Lithium complex
Base fluid type	Hydrotreated	Hydrotreated
Solids, %	4	4
Kinematic viscosity of base oil, ASTM D 445		
cSt @ 40°C	330	410
cSt @ 100°C	28	32
Cone penetration, ASTM D 217		
W×60, mm ⁻¹	322	275
Dropping point, °C, ASTM D 2265	269	273
Oil separation, 24 h @ 100°C, %, FTMS 791C-321.3	6	1
Four ball wear, 60 min @ 392 N, mm, ASTM D 2266	0.5	0.45
Four ball EP, weld point, N, ASTM D 2596	6,076	6,076
Timken OK load, N, ASTM D 2509	200	222
Water spray-off, % weight loss, ASTM D 4049	10	4
Corrosion prevention, 48 h @ 52°C, rating, ASTM D 1743	pass	pass
Copper corrosion, T2 copper strip, 24 h @ 100°C, rating, ASTM D 4048	pass	pass

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

Industry and OEM specifications

Sinopec Premium Mining Grease meets the performance requirements of the following industry specifications:	
Sinopec	SHRH YXY 5165-2010

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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