

Product	Sinopec Lithium Base with Molybdenum Disulfide Grease
Summary	Product description Sinopec Lithium Base with Molybdenum Disulfide Grease is an extreme pressure/antiwear grease, formulated with a lithium soap thickener and high-quality mineral base oil. It contains selected additives and molybdenum disulfide (MoS ₂ or 'moly'). It has outstanding extreme pressure/antiwear properties and mechanical stability. Available as NLGI grades 1, 2 and 3.

Applications

Sinopec Lithium Base with Molybdenum Disulfide Grease is suitable for use in:

- Bearings and gears of heavily loaded equipment operating under vibrating/oscillating conditions, such as those used in the steel and mining industries, where a robust extreme pressure/antiwear grease is required.
- Applications where the temperature range is from -20°C to +120°C.

Features and benefits

- Excellent extreme pressure and antiwear properties protect heavily loaded or shock-loaded bearings and gears from wear, extending equipment life.
- 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 the surfaces.
- Lithium soap thickener ensures good mechanical stability, so the grease structure does not soften or break down in service.
- Good water resistance properties ensure the grease is not easily washed out of bearings or off gear surfaces, so ensuring optimum protection.
- Good adhesive properties ensure the grease sticks to the metal surfaces sealing out dirt and abrasive materials, and so allows longer lubricating intervals.
- Provides good protection against rust and corrosion, extending component life and relubrication intervals.
- Available in NLGI grades 1, 2 and 3 to meet the requirements of specific applications.

Product Data Sheet

Typical data

Sinopec Lithium Base with Molybdenum Disulfide Grease			
NLGI grade	1	2	3
Appearance, visual	Smooth, black, buttery		
Thickener type	Lithium		
Base fluid type	Mineral		
Kinematic viscosity, ASTM D 445			
cSt @ 100°C (range)	9–12	9–12	9–12
Cone penetration, ASTM D 217			
W×60, mm ⁻¹	329	289	240
W×100,000, mm ⁻¹	340	314	280
Dropping point, °C, ASTM D 566	194	199	200
Oil separation, 24 h @ 100°C, %, FTMS 791C-321.3	6.6	2.8	0
Apparent viscosity, -15°C, 10 s ⁻¹ , Pas, GOST 7163	198	320	891
Oxidation stability, 100 h @ 99°C & 758 kPa, pressure drop, kPa, ASTM D 942	19	30	49
Corrosion prevention, 48 h @ 52°C, rating, ASTM D 1743	pass	pass	pass
Water washout, 1 h @ 38°C, %, ASTM D1264	3.5	1.25	1.25
Four ball EP, maximum non-seizure load P _B , N, ASTM D 2596	618	618	618

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

Industry and OEM specifications

Sinopec Lithium Base with Molybdenum Disulfide Grease meets the performance requirements of the following industry specifications:	
Sinopec	Q/SH303 357-2004

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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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