

Product Data Sheet

Product	Sinopec MoS₂ Lithium Complex Grease 7413 No. 2
Summary	Product description Sinopec MoS ₂ Lithium Complex Grease 7413 No. 2 is an extreme pressure grease formulated with a lithium complex soap thickener, semi-synthetic base oil (mineral oil plus polyalphaolefin), selected additives and 3% of molybdenum disulfide (MoS ₂ or 'moly'). It is suitable for use in bearings that are exposed to high temperatures, shock loading or severe vibrating/oscillating conditions, such as those use in heavy duty industrial and automotive applications.

Applications

Sinopec MoS₂ Lithium Complex Grease 7413 No. 2 is suitable for use in:

- Bearings exposed to high temperatures, extreme pressure or oscillating conditions, such as slow-moving plain and rolling element bearings.
- Bucket pins, plain bearings and other heavy duty applications, such as those found in the mining, construction, agricultural and sugar milling industries.
- Chassis components, farm equipment, king pins, U-joints and fifth wheels.

Features and benefits

- Lithium complex soap thickener together with semi-synthetic base oil, and antioxidant additives, provide outstanding performance in high-temperature applications.
- Extreme pressure properties protect metal surfaces under conditions of heavy or shock loading.
- 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.
- The semi-synthetic base oil ensures the formation of a stable oil film that protects against bearing wear and corrosion.
- Excellent thermal and oxidation stability, together with low oil evaporation loss, extend the life of the grease, ensuring protection of metal surfaces and prolonging bearing and component life.
- Provides good protection against rust and corrosion, extending component life and relubrication intervals.
- Excellent mechanical stability ensures the grease structure does not break down in service, thus extending grease life.
- Available as an NLGI grade 2.



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Typical data

Sinopec MoS ₂ Lithium Complex Grease 7413 No. 2		
NLGI grade	2	
Appearance, visual	Black, smooth & buttery	
Thickener type	Lithium complex	
Base fluid type	Mineral oil + polyalphaolefin (PAO)	
Kinematic viscosity of base oil, ASTM D 445		
cSt @ 40°C	160	
cSt @ 100°C	18	
Cone penetration, ASTM D 217		
W×60, mm ⁻¹	285	
W×100,000, mm ⁻¹	325	
Apparent viscosity, -20°C, 10 s ⁻¹ , Pa s, SH/T 0048	1,420	
Evaporation loss, 1h @ 180°C, %wt, SH/T 0337	3.3	
Dropping point, °C, ASTM D 2265	>300°C	
Oil separation, 24 h @ 100°C, %, SH/T 0324	5.8	
Load carrying capacity (Four ball test), 1500 rpm, 25℃, N, GB/T 3142		
maximum nonseizure load, P _B	1,766	
weld load, P _D	6,082	
load wear index	916	
Steel corrosion, 3 h @ 100°C, SH/T 0331	pass	

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

Industry and OEM specifications

Sinopec MoS₂ Lithium Complex Grease 7413 No. 2 meets the performance requirements of the following industry specification:		
Sinopec	Q/SH 303.219-2010	

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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