SINOPEC | 长城润滑油

Safety Data Sheet

According to SS586:2014

Sinopec Moly-Lithium Grease NLGI 2

Version 1.0

Issue date: 12/01/2015

Revision date: 12/01/2015 **SDS Record Number: CSSS-TCO-010-116053**

Section 1 Identification of the substance/mixture and of the company/undertaking

Product identifier:

Identification on the label/Trade name:	Sinopec Moly-Lithium Grease NLGI 2
Additional identification:	Not available
Identification of the product:	See section 3
Index Number:	Not available
REACH registration No.:	Not available

Relevant identified uses of the substance and uses advised against:

Identified uses:

Suitable for lubricating the parts such as bearings、gears and coupling of high load mechanical equipment.

Uses advised against:

Not available.

Details of the supplier of the safety data sheet:

Supplier(Manufacturer):	SINOPEC LUBRICANT CO., LTD.
Address:	No. 6 Anning Zhuang West Road, Haidian District, Beijing, P.R.China
Contact person(E-mail):	csc.lube@sinopec.com
Telephone:	86-400-810-9886
Fax:	86-10-82410856

Emergency telephone Number:

86-400-810-9886 Only available during office hours (8:30a.m.-17:30p.m. Beijing Time Zone)

Available outside office hours? YES [ ] NO [X]

Section 2 Hazards Identification

Classification of the substance/mixture:

GHS Classification Not classified

label elements:

Hazard Pictograms: No hazard pictogram is used.

Signal Word(S): No signal word is used.

Hazard Statement: Not applicable.

Precautionary statement: Not applicable.

Other hazards:

Not available.

Section 3 Composition/information on ingredients

Substance/Mixture: Mixture

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Base oil	N/A	64742-44-5	265-146-1	75-90%
lithium 12-hydroxystearate	N/A	7620-77-1	31-536-5	6-15%
Additive	N/A	1317-33-5	215-263-9	<14 %

Section 4 First aid measures

Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

In case of inhalation:

Remove victim to fresh air and provide oxygen. Get medical attention.

In case of skin contact:

Flush skin with water, and then wash with soap and water. Get medical attention.

In case of eyes contact:

Flush with water for 15 minutes. If irritation occurs, get medical attention.

In case of ingestion:

Do not induce vomiting. Get medical attention.

Most important symptoms and effects, both acute and delayed:

The product is not classified as harmful to human health effect.

Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Fire-Fighting measures

Extinguishing media:

Suitable extinguishing media:	Use water Carbon dioxide, foam, dry chemical and water fog.
Unsuitable extinguishing media:	Water.
Special hazards arising from the substance or mixture	In case of heat, fire and strong oxidants can lead to burning. Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes, nitrogen oxides, phosphate, certain metal oxides and other decomposition products, in the case of incomplete combustion.
Special fire fighting methods and special protective actions for fire-fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:	Provide adequate ventilation. Avoid skin and eye contact. Refer to section 8 of SDS for personal protection details.
For emergency responders:	Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.
Environmental Precautions:	Do not allow material to be released to the environment without proper governmental permits.
Methods for Containment and Cleaning up:	For large spills: Remove with vacuum truck or pump to storage/salvage vessels. For small spills: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.
Reference to other sections:	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.
Additional information:	Not applicable.

Section 7 Handling and storage

Precautions for safe handling:

Protective measures:	Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Advice on general occupational hygiene:	Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.
Conditions for safe storage, including any incompatibilities:	Do not store in open or unlabeled containers. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.
Specific end use(s):	Not applicable.

Section 8 Exposure Controls/Personal Protection

Control parameters:

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA:

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US ACGIH Threshold Limit Values (TLV)	lithium 12-hydroxystearate	Stearates(J)	10 mg/m3	Not Available	Not Available	TLV® Basis: Eye, skin, & URT irr
US ACGIH Threshold Limit Values (TLV)	Additive	Molybdenum, as Mo – Soluble compounds / Molybdenum, as Mo - Metal and insoluble compounds	10 mg/m3 / 3 mg/m3	Not Available	Not Available	Not Available

EMERGENCY LIMITS:

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
Additive	Molybdenum(IV) sulfide	50 mg/m3	66 mg/m3	400 mg/m3

Ingredient	Original IDLH	Revised IDLH
lithium 12-hydroxystearate	Not Available	Not Available
Base oil	Not Available	Not Available
Additive	N.E. mg/m3 / N.E. ppm	5,000 mg/m3

Exposure controls:

Appropriate engineering controls: Provide adequate ventilation to control airborne concentrations below the exposure guidelines/limits.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Chemical goggles, or Safety glasses with side shields.

Hand protection: Use protective gloves which is chemically resistant to this material.

Body protection: Use protective clothing and shoes which are chemically resistant to this material.

Respiratory protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn.

Thermal hazards: Wear suitable protective clothing to prevent heat.

Environmental exposure controls: Avoid discharge into the environment.
According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

Information on basic physical and chemical properties:

Appearance: Black smooth buttery
Colour: Black
Odour: No peculiar smell
Odour threshold: Not available
pH: Not available
Melting point/range (°C): 0 °C (Base oil)
Boiling point/range (°C): >= 207 <= 750 °C (Base oil)
Flash point (°C): 245°C (open cup)
Evaporation rate: Not available
Flammability limit - lower (%): Not available
Flammability (solid, gas): Not available
Ignition temperature (°C): Not available
Upper/lower flammability/explosive limits: Not available
Vapour pressure: <.0.5MPa (40 °C)
Vapour density: >1(air=1)
Density: 0.85-1.0 kg/l（20 °C）
Bulk density (kg/m^3): Not available
Water solubility (g/l): Insoluble in water
n-Octanol/Water (log Po/w): >6
Auto-ignition temperature: >260 °C
Decomposition temperature: Not available
Viscosity, dynamic (mPa.s): Not available
Explosive properties: Non explosive
Oxidising properties: Not oxidizing

Molecular Formula: Not available
Molecular Weight: Not available

Other information:

Fat solubility(solvent– oil to be specified) etc: Not available
Surface tension: Not available
Dissociation constant in water(pKa): Not available
Oxidation-reduction Potential: Not available
Specific gravity: Not available

Section 10 Stability and reactivity

Reactivity: The substance is stable under normal storage and handling conditions.
Chemical stability: Stable at room temperature in closed containers under normal storage and handling conditions.
Possibility of hazardous reactions: Contact with strong oxidants can lead to burning.
Conditions to avoid: Extreme heat and high energy sources of ignition and strong oxidizers.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes, nitrogen oxides, phosphate, certain metal oxides and other decomposition products, in the case of incomplete combustion.

Section 11 Toxicological information

Toxicokinetics, metabolism and distribution:

Non-human toxikological data: Not available

Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat): > 5000 mg/kg bw
LD50(Dermal, Rat): > 2000 mg/kg bw
LC50(Inhalation, Rat): > 10000 mg/m^3 bw
Skin corrosion/Irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
STOT- single exposure: Not classified
STOT-repeated exposure: Not classified

Section 12 Ecological information

Toxicity: Base oil (CAS: 64742-44-5):

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LL50	> 100 mg/L	96h	Fish	OECD 203	N/A	N/A
LL50	> 10000 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

lithium 12-hydroxystearate (CAS: 7620-77-1):

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LL50	> 100 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	> 100 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EL50	> 160 mg/L	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: This product is expected to be inherently biodegradable.
Bioaccumulative potential: Bioaccumulation is unlikely due to the very low water solubility of this product; therefore bioavailability to aquatic organisms is minimal.
Mobility in soil: When released into the environment, adsorption to sediment and soil will Be the predominant behavior.
Results of PBT&vPvB assessment: Not available.
Other adverse effects: Though long time infiltration, it may produce ecological toxicity.

Section 13 Disposal considerations

Waste treatment methods: The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

Product / Packaging disposal: If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations.

Section 14 Transport information

	Land transport(ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not regulated	Not regulated	Not regulated
UN Proper shipping name	Not regulated	Not regulated	Not regulated
Transport hazard Class	Not regulated	Not regulated	Not regulated
Packaging group	Not regulated	Not regulated	Not regulated
Environmental hazards	No	No	No
Special precautions for user	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

Section 15 Regulation information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

lithium 12-hydroxystearate (7620-77-1) is found on the following regulatory lists	"Singapore Permissible Exposure Limits of Toxic Substances"
Base oil (64742-44-5) is found on the following regulatory lists	"Singapore Permissible Exposure Limits of Toxic Substances", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs"
Additive (1317-33-5) is found on the following regulatory lists	"Singapore Permissible Exposure Limits of Toxic Substances", "International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs"

Section 16 Other information

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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