SINOPEC | 长城润滑油

Chemical Safety Data Sheet (MSDS)

1) Chemical and Corporate Identification

brand mark

Chemical Name	**Puli L-HM46 Anti-wear Oil(High Pressure)**
Chemical English Name	L-HM 46 Anti-Wear Hydraulic Oil(High pressure)
Product Code	60521295
Recommended Uses and Restricted Uses	**Applied to medium-and high-pressure hydraulic systems for industrial, marine, and mobile mechanical equipment**
Manufacturer Name	**China Shi Chemical Lubricants Co., Ltd.**
Manufacturer Address	**No.6 Anningzhuang West Road, Haidian District, Beijing Post Code: 100085**
Enterprise Emergency Phone	00-86-400-810-9886 **Pass the true number: 00-86-10-82410856**
URL	http://sinolube.sinopec.com/
E-mail	**If you have any related inquiries regarding this MSDS content,please email us** csc.lube@sinopec.com
Availability date	2022-03-01

2) Risk Overview

GHS Hazard Category	**No hazard**
GHS label must include the following elements:	
Symbol	**Non-compliant combination**
Warning Word	**No warning word**
Hazard Statement	**Physical hazards:**

According to the GHS standard, it is not classified as a hazardous substance.

Health Risk:

According to the GHS standard, it is not classified as a health hazard substance. Environmental hazard

According to the GHS standard, it is not classified as an environmentally hazardous substance.

GHS Prevention Measures Description

Prevention Measures	No preventive terms
Accident Response	No preventive terms
Secure Storage	No preventive terms
廢棄Location	No preventive terms
Does not affect other hazards in the category	**Not classified as combustible,but can burn**

Main Symptoms and Emergency Overview: According to animal studies, there is no strong evidence to prove that this product causes cancer. Under normal circumstances,this product does not endanger health; however, excessive exposure may cause irritation to the eyes, skin,respiratory tract, etc., leading to irritation. It is not suitable for washing as it may clog skin pores,resulting in oily powder irritation, folliculitis,and other conditions.

Used oil may contain harmful impurities.

3) Ingredients/Composition Information

dispensing information **This product is a mixture whose main ingredients include highly refined mineral oil and petroleum additives.**

Chemical Substance Name	Case Number or Identification Number	EC number	Content, wt%
Fine refined mineral base oil	Mixture	---	90-99.5
Add Agent	Mixture	---	0.5-10

4) emergency treatment

General Information **Use under normal operating conditions should not pose a health hazard.**

Management of inhalation with different contact methods

No medical emergency treatment is required. If you experience symptoms such as cough or difficulty breathing,consult a doctor.

Skin contact

No medical treatment is required.Remove contaminated clothing, wipe the affected area clean, and wash with soap and clean water.Before reuse, thoroughly wash all clothing and footwear.Seek medical attention if necessary.

Eyes touch

No medical emergency treatment is required. Rinse with water for 15–20 minutes. Seek medical attention if necessary.

Ingestion

No medical emergency treatment is generally required unless a large amount is ingested. As a preventive measure, medical consultation is recommended.

Main symptoms (acute/delayed-onset)

Under high temperatures,long-term inhalation of oil mist or vapor may potentially cause inflammation of the respiratory organs.Long-term or repeated skin contact can lead to irritation or skin inflammation, while eye contact may cause mild irritation to the eyes.Large amounts ingestion may induce gastrointestinal inflammation, vomiting, and diarrhea.

5) fire protection

Highly Dangerous

This product has a flash point greater than 200°C and is not classified as hazardous. It may easily ignite upon exposure to high temperatures, open flames,or strong oxidizers.

Fire extinguishing methods and fire extinguishing agents

Water sprinkling or spraying, foam extinguishers, carbon dioxide extinguishers, dry powder extinguishers. Sand extinguishing is only suitable for small fires.

Harmful substances produced during combustion

During incomplete complete combustion,dense smoke,carbon monoxide,carbon dioxide, sulfur oxides, aldehydes, nitrogen oxides compounds, phosphoric acid salts, certain metal oxides, and other decomposition products are generated.

The use of this fire extinguishing agent is prohibited

Do not spray water

Special protective equipment for firefighters

When approaching a fire point in a confined space, it is necessary to wear a breathing apparatus.

6) Leak Emergency Response

Avoid contact with substances that are overflowing or releasing. For guidance on selecting personal protective equipment, see Chapter 8 of the Safety Technical Manual; for information on disposal, refer to Chapter 13 of the Safety Technical Manual. Please comply with all applicable local or national regulations.

Emergency Response Procedure	Cut off the fire source immediately and contact the personnel involved. Have non-related individuals evacuate promptly to a safe area and isolate the area. Try to cut off the leakage source as much as possible to prevent it from entering sewers, drainage channels, water bodies or other spaces. Follow relevant fire safety procedures and refer to Chapter 8 of the Safety Technical Manual.
Operational personnel protection measures; Environmental protection measures.	Avoid contact with skin and eyes. Before the personnel arrive at the site, try to contain the spilled substances. For minor leaks, collect the spill using wood chips, sand,mud, or other absorbents and place it in a sealed,leak-proof container for disposal; for major leaks, construct a barrier or dig a pit to collect the material, ensuring it does not enter sewers, rivers, water sources, or low-lying areas. Spilled substances should be disposed of in appropriate containers. If soil or plants are contaminated, report it to the relevant authorities. For the disposal of waste materials, refer to Chapter 13 of the Safety Technical Manual.
Elimination Method	For large-scale leaks, use a genuine vacuum pump to draw the liquid into a container; for minor leaks, use wood chips, sand, soil, absorbent cotton, or other adsorbents to prevent dispersion and store the liquid in a sealed container for treatment. In case of land-based leaks, implement protective measures to cut off the pollution source and minimize contamination of surface water to the lowest possible level. For water route leaks, immediately use oil booms to contain the leaking oil,warn nearby vessels, and employ appropriate dispersants when necessary. Unhandleable severe spill incidents should be reported to local authorities.

7) Operation, Handling, and S

Operation Handling

General Preventive Measures	Avoid prolonged or repeated contact with skin; thoroughly wash after contact. If there is a risk of inhaling vapor,mist, or smoke mist,use local exhaust ventilation equipment. Handle with care during transportation to prevent damage to packaging and containers.
Safety Placement Notes	Operational personnel must receive specialized training and strictly adhere to operating procedures. Avoid contact with oxidizers at all times. Equipped with appropriate safeguards. Number of fire extinguishers and leak response equipment. When loading/unloading 200-liter containers for products,protective footwear should be worn. Empty containers may contain residual hazardous substances. Invert
condition of storage	Keep the container sealed and do not store it in an open container or one without proper labeling. Store under cool, dry conditions. Keep away from strong oxidizers, sources of ignition, heat sources, and flammable materials. Store at room temperature. Empty containers may retain residual product; do not cut or weld, and avoid exposure to high temperatures or flames.

8) Contact Control and Perso

acceptable concentration — Maximum Permissible Concentration for Occupational Exposure to High-Purity Refined Mineral Oil

America ACGIH:

STEL:10 mg/m³ Form:mineral oil

mist in Sinopec Lubricants Co., Ltd.Company

TWA: 5 mg/m ^{3}; Form:mineral oil mist

China MAC:

Not yet standardized

Engineering Control Method	Provide exhaust ventilation or other engineering controls to ensure that the concentration of relevant substances in the air is below the levels specified by standards.
Personal Protection Equipment	Personal protective equipment must comply with relevant national standards. For specific details, please consult your personal protective equipment supplier.
Respiratory System Protection	Under normal operating conditions, wearing respiratory protection equipment is not required. If the engineering control measures fail to maintain the oil mist concentration at a level sufficient to protect the health of relevant personnel,appropriate respiratory protection equipment compliant with applicable regulations must be selected. For specific details, please consult the respiratory protection equipment supplier.
Hand Protection	Use oil-resistant and chemical-resistant protective gloves. It is recommended to use nitrile rubber, neoprene rubber, or polychloro ethylene gloves. Replace contaminated gloves promptly. After operation, thoroughly clean them with fat soap and water completely.
Eye Protection	If splashing is possible, use safety goggles.
Skin and Body Protection	Under normal operating conditions, apart from standard work garments,no special skin or body protective equipment is required. When there is a risk of spillage, please select appropriate, permeable safe clothing and safety footwear based on the actual conditions of the work environment; nitrile rubber is recommended as the material.

9) Physical and Chemical Properties

Surface	A transparent oily liquid, ranging from light yellow to brown
Smell	No odor or slight odor
pH price	Inapplicable
Melting point	Not applicable
Pour point	-12°C (typical value)
Initial boiling point;	Not applicable
Flash point	238°C (open cup) (typical value)
Explosion limit	No materials
Steam pressure	<0.5 Pa @ 20°C (estimated value)
Vapor density	>1 (Empty air= 1)
Density	0.84-0.95 kg/l（20℃）
Solubility	Insoluble in water
Octanol/Water Ratio	Not applicable
Autogenous ignition temperature	>320℃
Decomposition temperature	Non-avaible
Dynamic viscosity	41.4mm^2/s-50.6mm^2/s@40℃

10) Stability and Antireacti

stability	stabilize

Possible hazardous reactions; Conditions under which such reactions should be avoided; Incompatible substances; Hazardous decomposition products;Decomposition products	Contact with strong oxidizing agents Extreme temperature, direct sunlight exposure, contact with strong oxidizing agents or fire sources, and strong oxygen ating agents No hazardous decomposition products will form under normal storage conditions.

11) Toxicological In

acute toxicity	Low expected toxicity. LD50:>5 g/kg (rabbit transdermally),>5 g/kg (rat orally). LC50> 10 g/m ^{3}(in rats)
Skin irritation or corrosion; Eye irritation or corrosion; Inhalation hazards	You may experience mild irritation.Long-term or prolonged contact with the skin, especially if not properly washed, may cause skin inflammation.You may also experience mild irritation. Inhalation of steam or oil mist may cause mild irritation.
Respiratory or skin allergy; germ cell mutation; carcinogenicity	It is expected that the substance does not act as a skin sensitizing agent and poses no risk of induction. Components in this product with a concentration greater than 0.1% do not fall under the category of carcinogens identified by the American Council on Industrial Health Sciences(ACGIH), the International Agency for Research on Cancer (IARC),or the European Commission.
Reproductive toxicity	No anticipated harm; No anticipated harm
Specificity of targeting target organ system toxicity toxicity-single exposure	
Specific targeting of target organs with toxicity-adverse effects upon repeated exposure	No anticipated harm
extraneous information	Used oil contains harmful impurities accumulated during use over time. The viscosity and composition of these impurities vary depending on the usage process and may pose health and environmental risks when handled. Used oil should be handled with care and contact with skin should be avoided as much as possible skin. Animal tests have shown that prolonged exposure to used engine oil can lead to skin cancer.

12) Ecological Information

Ecotoxicity	No relevant data
Durability and degradation; potential biological accumulation; mobility in soil	It is not expected to be easily biodegradable. The formulation contains components with potential for bioaccumulation. If it enters the soil, it will be absorbed by soil particles and will not move.

13) Disposal of W

Residual waste materials	It shall be recycled as much as possible or reused, or collected centrally by a waste collector approved by the relevant laws. place 。
Container Location	Disposal should be carried out by a waste collection provider approved by the relevant regulations as far as possible.

wasted Note Item	Use personal protective equipment. Avoid allowing waste to come into contact with soil or enter drainage systems. Do not transport or store waste.
	Use transportation vehicles, recycling packaging, treatment or storage equipment approved by authorized authorities.

14) Transportation Information

During land,sea, and air transportation, this product is not classified as a hazardous substance.

UN Hazardous Goods Number	not applicable
UN Transport Name Name	not applicable
UN Hazard Classification Packaging Group	not applicable
	not applicable
Marine pollution substances	not applicable

15) Legal Regulati

According to the relevant laws and regulations of China's regional authorities, this product does not fall under the category of hazardous chemicals.

Domestic Regulations on the Safety Management of Chemical Products Law: Regulations on the Safety Management of Hazardous Chemicals(issued by the State Council on March 2, 2011)

Regulations on the Safe Use of Chemicals in the Workplace([1996] Labor Ministry Document No.423)

GB 6944 Classification and Name Number of Hazardous Goods

GB/T 16483 Chemical Safety Technical Description Book Content and Item Sequence

GB 13690: General Principles for the Classification of Chemicals and the Public Disclosure of Their Hazards

GB 12268 List of Names for Hazardous Goods

GB 15258: Requirements for the Preparation of Safety Labels for Chemical Products

GBZ 2.1 Occupational exposure limits for harmful factors in the workplace Part 1: Chemical harmful factors Chemical harmful factors

The Regulations, in view of the safe use,production, storage, transportation, loading and unloading of chemical hazardous substances, have established corresponding provisions.

16) Other Informa

Revision Date:	March 1, 2022
MSDS Version No.Other Material Revision Statement	Fifth Edition
	Other information and manuals can be obtained through the Sales Department and Technical Service Department.
	The information provided is based on our understanding of the existing data, and the product description is intended solely to meet health, safety and environmental requirements. We do not provide any warranties regarding the specific characteristics of the product.