

Material Safety Data Sheet (MSDS)

L-HM Anti-wear hydraulic oil

Version No. : **A1 version**

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1. PRODUCT AND COMPANY INFORMATION

Product Name : *Anti-wear hydraulic oil L-HM32/46/68*

Product Classification : Hydraulic oil

Commodity Name : *High-efficiency anti-wear hydraulic oil L-HM32/46/68*

Product Usage: Suitable for all kinds of engineering and machinery and mobile hydraulic transmission systems

APPLICATIONS: For Stock No. 83985 Air Impact Wrench Kit, 1/2" Sq. Dr. (14 Piece)

SUPPLIER: Draper Tools Ltd
Hursley Road
Chandlers Ford
Eastleigh
Hampshire
SO53 1YF

Draper Helpline +44 (0) 2380 494344
Opening hours 8:30-17:00 Monday - Friday.

2. Product Composition Information

This product is a mixture of refined lubricating oil base oil and additives, and the composition and content are all weight percentages.

Ingredient	Content quantity (WT%)	CAS No.
Refined Base Oil	≥ 98.5	
Additives	<1.5	

Hazardous substances to be disclosed:

Alkyl Polysulfide	<1.1	Proprietary Compound
Alkyl Phosphate Salt	<0.15	Proprietary Compound

3. Hazard Analysis

According to the national standard "Code for Fire Protection Design of Petrochemical Enterprises", this product is classified as a Class C and B combustible liquid. Query GB 12268 "List of Dangerous Goods" does not belong to dangerous goods. Under normal use, this product has no unpredictable danger.

Physical/chemical hazard category: not classified as a hazardous substance. Health risk category: no obvious hazard.

Health hazards: This product may produce oil mist in some applications. Excessive exposure to liquids and oil mist may cause skin and eye irritation, which may cause respiratory irritation and damage, and aggravate the original asthma and other respiratory diseases. Inadvertently swallowing a large amount seriously damages the digestive system, and rescue measures should be taken in time.

Environmental hazards: harmful to the environment, pollution of soil and water bodies should be prevented.

4. FIRST AID MEASURES

When inhaling: leave the scene quickly to a place with fresh air, and keep the respiratory tract unobstructed. If dizziness, nausea, or confusion occurs, seek medical attention immediately.

When ingested: Drink enough warm water to induce vomiting. If swallowed in large quantities, they should be sent to the hospital for treatment immediately, and vomiting or other first aid measures should be taken under the guidance of a doctor.

Eye contact: Open the upper and lower eyelids immediately, rinse with running water or normal saline. If continuous irritation occurs, seek medical attention.

Skin contact: Take off contaminated clothing, wash the contaminated part with soap and plenty of running water. If the product is injected into the skin or any part of the human body, regardless of the appearance or size of the wound, it must be immediately sent to the hospital for surgical examination and treatment.

5. FIRE FIGHTING MEASURES

Hazardous characteristics: The flash point of this product is greater than 200°C. and it may burn when exposed to open flames, high heat or contact with oxidants. Hazardous combustion products: CO, CO₂, sulfide, solid suspended particles and complex combustion mixture.

Fire fighting method: firefighters must wear gas masks and full-body fire fighting clothes, and put out the fire in the upwind direction. Move the container from the fire scene to an open place as much as possible. If the container in the fire scene has changed color or produces sound from the safety relief device, it must be evacuated immediately.

Extinguishing agent: Foam, dry powder, carbon dioxide, sandy soil can be used to extinguish the fire. Do not use water as a fire extinguishing agent.

6. ACCIDENTAL RELEASE MEASURES

Emergency treatment: When a leak is found, immediately cut off the fire source and isolate the combustibles. After risk assessment, if necessary, organize the evacuation of personnel from the contaminated area to a safe area. When removing spills, personal safety protection equipment must be worn. During the emergency rescue process, care should be taken to prevent secondary disasters such as personal injury and environmental pollution.

Small amount of leakage: collect the spilled liquid in a closed container as much as possible, absorb the remaining liquid with sand, activated carbon or other inert materials, or brush with an emulsion made of non-combustible dispersant. The lotion should be harmless Disposal. A large number of leaks: report to relevant departments according to the degree of risk. Build a dike or dig a pit for shelter. Use a pump to transfer to a closed container, recycle or transport to a waste disposal site for disposal.

7. HANDLING AND STORAGE

Operation precautions: The place where this product is used should meet the requirements of fire protection design codes, and the operation process should avoid excessive oil mist. Operators should be trained in fire safety and equipped with necessary labor protection equipment to avoid inhaling oil mist. Leakage of production equipment should be eliminated to avoid the risk of personnel slipping.

Storage precautions: This product should be stored in a closed, cool, dry, and ventilated place, away from open flames, high-temperature heat sources, strong oxidants and flammable materials, and avoid mixing foreign materials such as water and impurities. The storage area should be equipped with necessary fire-fighting equipment and emergency treatment equipment for leakage. Some products may still remain in the empty container. Do not heat, cut, or weld with an open flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Maximum allowable concentration: When oil mist occurs, the following air hygiene standards are recommended: the United States ACGIH specifies the maximum allowable concentration (TLV) of 5 mg/m³; the United States ACGIH specifies the short-time average allowable concentration (STEL)

It is 10 mg/m³.

Engineering control: There is no special protection requirement under normal use environment and sufficient ventilation conditions.

Eye protection: It is recommended to use protective glasses with side shields when touching the product. Wear chemical goggles in the presence of oil mist.

Skin protection: Wear non-permeable safety clothing and safety shoes to minimize skin exposure.

Hand protection: wear oil-resistant protective gloves (such as nitrile rubber), high-quality PVC.

Respiratory system protection: engineering control facilities should be used as far as possible to ensure ventilation of the use place, and avoid production at the work site.

Generate a lot of oil mist. If you cannot ensure that the concentration of air pollutants is at a level that protects the health of employees, you should choose to wear approved respirators. It is recommended to wear particulate air purifying respirators that can purify dust or oil mist or self-contained respirators.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are as follows. For more information, please consult the supplier in the first part. Appearance: yellow transparent liquid.

Odor: unique odor, non-irritating

Mechanical impurities, %: not more than 0.02

Flash point (open), °C: not less than 200

Moisture, %: not more than traces

Solubility: Insoluble in water, soluble in most organic solutions such as alcohols, ethers, ketones, fats, and hydrocarbons.

10. STABILITY AND REACTIVITY

Stability: This product is stable under normal conditions. Substances to avoid: strong oxidizers.

Conditions to avoid: Open flames, high heat sources.

Hazardous decomposition products:

Possibility of hazardous reactions: Hazardous polymerization reactions will not occur.

11. TOXICOLOGICAL INFORMATION

The following information is provided based on product ingredients and toxicological data of similar products. Acute toxicity:

Oral toxicity test (one maximum test): LD50 of female and male mice are both greater than 2000mg/kg,

It is extremely low toxicity.

Acute inhalation toxicity test (one maximum test): LC50 of female and male mice are both greater than 10mg/L.

It is extremely low toxicity.

Skin irritation (rabbit): The irritation to the skin at normal temperature is negligible.

Eye irritation (rabbit): May cause moderate, short-term eye discomfort.

Respiratory tract and skin allergy and carcinogenicity: The deeply refined base oil has no carcinogenicity in animal experiments. However, animals exposed to high concentrations of oil mist can cause oil deposits, inflammation and oil tumors in the respiratory system. When oil is pyrolyzed or mixed with waste oil, polycyclic aromatic hydrocarbon compounds may be produced or pollutants may be caused by bacteria. May cause cancer or cause severe respiratory damage.

Germ cell mutagenicity: No relevant test data Reproductive toxicity: No relevant test data

12. ECOLOGICAL INFORMATION

Ecotoxicity: This product is basically harmless to aquatic organisms, but under the condition of long-term penetration and long-term accumulation of large amounts, it may produce eco-toxicity.

Mobility: This product is a hard-to-volatile liquid. It will not produce oil vapor in the natural environment and affect the atmosphere. It has low water solubility and can migrate from water to land in a floating state. When it enters the soil, it will be absorbed by soil particles and cannot flow.

Persistence and degradability: The base oil components in the product can be biodegraded naturally, with the potential for bioaccumulation.

13. DISPOSAL CONSIDERATIONS

Nature of waste: HW08-Waste Mineral Oil in "National Hazardous Waste List"

Disposal methods: Must comply with the applicable local laws and regulations at that time. If possible, it should be handed over to an organization with corresponding hazardous waste disposal qualifications for product recycling. It is recommended to be used as a boiler fuel under controllable conditions, and to monitor the harmful emissions of exhaust gases produced by high-temperature combustion. Temporary storage of waste should be stored in airtight containers and protected from light, and must be marked as necessary.

14. TRANSPORT INFORMATION

China "List of Dangerous Goods" (GB12268): This product does not belong to nine categories of dangerous goods. China/International Shipping Regulations:

Shipping (International Maritime Dangerous Goods):

Air transport (International Air Transport Association): Air transport is not regulated.

15. REGULATORY INFORMATION

This product is not a dangerous product, so it is not applicable to China's "Regulations on the Safety Management of Hazardous Chemicals", but as a flammable liquid, it should meet the "Safety Production Law of the People's Republic of China" and Corresponding provisions of the Fire Protection Law of the People's Republic of China.

Waste disposal shall comply with the "Environmental Protection Law of the People's Republic of China" and the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes", the local environmental discharge standards and other relevant regulations. Meet the requirements of the following countries and regions: IECSC (Inventory of Existing Chemical Substances in China), DSL (Canada), EINECS (European Union), ENCS (Japan), KECI (South Korea), PICCS (Philippines), TSCA (United States), AICS (Australia).

16. OTHER INFORMATION

This product safety technical manual is formulated based on current knowledge and applicable laws and regulations. This product is described in terms of health, safety and environmental regulations. It is possible to revise it according to the updated standards and test data.

The data and suggestions provided in this product safety data sheet are only applicable to the specified use of this product. Except for the specified purposes, _____ will not be held responsible for any damage or injury caused by failure to follow the recommendations. Users who purchase this product can obtain other information through the sales department and technical service department.