

<b>Product</b>	<b>Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM</b>
<b>Summary</b>	<b>Product description</b> Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM is a line of premium quality antiwear lubricants blended using selected and highly refined high-quality mineral oils, combined with a non-zinc, ashless additive system and available in a wide viscosity range from ISO Grade 32 to 100. This line of oils has been designed to meet the very stringent requirements of the Denison T6H20C test, for use in high-pressure and double pumps (piston pump and vane pump).

## Applications

Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM is suitable for use in:

- Severe hydraulic applications, such as in vane pumps and/or piston pumps running under high-pressure conditions.
- High-precision hydraulic systems containing copper or silver components.

Caution: avoid mixing Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM grades with non-ashless antiwear hydraulic oils as this may be detrimental to their performance.

## Features and benefits

- The non-zinc, ashless antiwear additive system is non-corrosive to silver and yellow metal alloys, and so is fully compatible with hydraulic pumps containing either silver or copper components, thus prolonging pump life.
- High-quality base oils combined with ashless additive technology provide outstanding antiwear properties, rust protection, low deposit formation, good demulsibility, oxidation resistance, good antifoam properties and fast air release properties, to protect and extend the life of hydraulic pumps and systems.
- Good hydrolytic stability and filterability, ensure optimum product life and performance, and prevent filter blocking.
- High viscosity index gives good viscosity characteristics over a wide temperature range; the wide selection of viscosity grades ensures that the optimum viscosity can be used for any hydraulic system operating temperature.
- Fully compatible with common seal materials usually found in hydraulic systems, to extend seal life and prevent fluid leakage.

# Product Data Sheet

## Typical data

<b>Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM</b>				
ISO viscosity grade	32	46	68	100
Kinematic viscosity, ASTM D 445				
cSt @ 40 °C	32.56	47.12	68.05	99.78
cSt @ 100 °C	5.42	6.74	8.56	11.14
Viscosity index, ASTM D 2270	100	97	97	97
Air release at 50 °C, min, ASTM D 3427	4	6	8	–
Foaming characteristics, sequences 1, 2 and 3, ml/ml, ASTM D 892	10/0 5/0 5/0	10/0 10/0 20/0	10/0 10/0 15/0	5/0 5/0 10/0
Neutralisation number, mg KOH/g, ASTM D 974	0.25	0.26	0.28	0.27
FZG test (A/8.3/90), fail load stage, DIN 51345	12	12	12	12
Rust prevention, ASTM D 665				
distilled water	pass	pass	pass	pass
synthetic sea water	pass	pass	pass	pass
Copper corrosion, 3 hours @ 100 °C, class, ASTM D 130	1b	1b	1b	1b
Water separability, min, ASTM D 2711	6 (54°C)	9 (54°C)	10 (54°C)	11 (82°C)
Pour point, °C, ASTM D 97	–18	–15	–12	–12
Flash point (COC), °C, ASTM D 92	215	235	248	263

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

## Industry and OEM specifications

<b>Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM meets the performance requirements of the following industry specifications:</b>	
DIN	51524 Pt 2
ISO	11158 (L-HM)

<b>Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM meets the performance requirements of the following OEM specifications:</b>	
Cincinnati Lamb	P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46)
Parker Denison	HF-0
<b>Sinopec High Pressure Ashless Antiwear Hydraulic Oil L-HM holds the following OEM approvals:</b>	
Cincinnati Lamb	P-68 (ISO 32), P-69 (ISO 68), P-70 (ISO 46)
Parker Denison	HF-0

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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.

The SINOPEC trademark is registered and protected in Australia..

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