

# Marine Hydraulic Oil (Ashless)

## L-HV 15, 32, 46, 68, 100

### Product Description

PetroChina Lubricant Company's L-HV Hydraulic Oil (ashless) series is produced with advanced technology. It has good anti-wear properties, oxidation and foam resistance, demulsibility and rust prevention properties, etc. It also has excellent low temperature performance.

### Applications

L-HV Hydraulic Oil (ashless) series is mainly used in all types of medium and high pressure hydraulic systems in the engineering, mineral machinery and ocean ships in the cold and very cold areas, especially the extreme harsh working environment.

### Features

- Superior high viscosity index and low temperature performance.
- Excellent anti-wear properties, demulsibility and hydraulic stability.
- Corrosion and rust resistance, foam suppression and effectively eliminates air entrapment.
- Excellent filterability
- Good compatibility with all common sealing materials.
- Zinc – free

## Specifications

Properties		HV15	HV32	HV46	HV68	HV100	Test Methods
Kinematic Viscosity (40°C)	mm <sup>2</sup> /s	15.21	33.12	47.21	67.58	100.51	ASTM D445
Density at 15°C	Kg/m <sup>3</sup>	871.1	873.1	875.1	883.1	885.1	ASTM D4052
Density at 20°C	Kg/m <sup>3</sup>	868	870	872	880	882	ASTM D4052
Viscosity Index		> 130					ASTM D2270
Flash Point (Open)	°C	>120	> 160				ASTM D92
Pour Point	°C	-37	-35	-35	-33	-21	ASTM D97
Air-release Number (50°C)	min	4.3	6.4	8.2	10.3	Report	SH/T 0308
Sealing Suitability Index	min	13	10	8	7	Report	SH/T 0305
Demulsibility (40-37-3), 54°C		< 30					ASTM D1401
Foam Tendency	mL/mL						ASTM D892
24°C		< 150/10					
93.5°C		< 150/10					
Later 24°C		< 150/10					
Water Content	%	Trace					ASTM D95
Mechanical Impurities	%	None					ASTM D97
Copper Corrosion (100°C,3h),	grade	1a					ASTM D130
FZG	grade	11					DIN 51534
Vane Pump (V104) Wear	mg	< 50					ASTM D2882

\* Above product typical properties are indicative and subject to change without prior notice

## Storage and Handling

- All containers, tanks, pipelines and valves has to be cleaned thoroughly and inspected to be clean for use before being used to transfer or transport L-HV 15, 32, 46, 68,100 to prevent contamination.
- Storage tanks/equipment must be dedicated and is recommended to be stored in an indoor and controlled environment.
- Storage tanks/equipment must be waterproof, mist-proof and free from other mechanical particles.
- Product must be labelled clearly and properly during the entire transportation process to prevent mixing of other petrol-chemical product into the hydraulic oil.