

HYDROPLUS HLP SERIES HLP TYPE HYDRAULIC FLUIDS

Product Description

HYDROPLUS Hydraulic HLP Series is premium high-performance oils intended for industrial and HYDROPLUS service where anti-wear lubricants are required. The HYDROPLUS Hydraulic HLP Series oils are designed to satisfy the performance requirements for a wide range of hydraulic components in systems subjected to high-pressure, high temperature operating environments. Their high level of resistance to oxidation and good thermal stability characteristics helps reduce deposit formation and help prevent sluggish system operation. They provide good protection against rust and corrosion in high humidity operations or where low levels of moisture are unavoidable. They separate water readily and have very good air release properties. These products meet the performance requirements of a wide range of hydraulic system and component OEM's and are compatible with the pump and component metallurgy used by various manufacturers.

The HYDROPLUS Hydraulic HLP Series oils are formulated with high quality base stocks and a carefully selected additive system that result in finished products that provide many desirable features to improve and prolong equipment life. They are designed to work with systems operating under moderate to severe conditions where a high level of anti-wear protection is needed, yet they are suitable for use in many systems where non-anti-wear hydraulic oils are generally recommended.

The HYDROPLUS Hydraulic HLP Series oils provide outstanding performance in a range of equipment operating under moderate to severe conditions. Their excellent oxidation resistance allows extension of oil and filter change intervals while assuring clean systems. Their high level of anti-wear protection and excellent film strength characteristics result in exceptional equipment performance that not only results in fewer breakdowns but help in improving production capacity. Their controlled demulsibility permits the oils to work well in systems contaminated with small amounts of water yet readily separate large amounts of water.

Performance Standards

IS 11656:1986 Amdt RA 2007

DIN 51524 Part 2 HLP

Dennison HF -2

Vickers I-286-S

CINCINNATI MILACRON P 68, P69, P70

Benefits

- Advance anti wear performance.
- Better surface properties reduce oil carryover.
- Good liquid and vapour phase rust protection.
- Provides long stand equipment life extends filter life.

Typical Properties

HYDROPLUS Hydraulic HLP Series	TEST METHOD	HYDROPLUS HLP 32	HYDROPLUS HLP 46	HYDROPLUS HLP 68	HYDROPLUS HLP 100	HYDROPLUS HLP 150
ISO Viscosity Grade		32	46	68	100	150
Kinematic Viscosity @ 40°C, cSt	ASTM D 445	31	45.5	66.67	98	148
Kinematic Viscosity @ 100°C, cSt	ASTM D 445	5.4	6.7	8.5	11.1	14.6
Viscosity Index, (min)	ASTM D 2270	95	95	95	95	95
Rust Characteristics	ASTM D 665 B	Pass	Pass	Pass	Pass	Pass
TOST Life to 2 NN, hours (min)	ASTM D 943	1000	1500	1500	1500	1000
Pour Point, °C, (max)	ASTM D 97	-22	-21	-21	-18	-18
Flash Point, COC, °C, Min	ASTM D 92	220	222	232	232	240
Emulsion, Time to 3 ml Emulsion @ 54°C, minutes (max)	ASTM D 1401	30	30	30	30	30
Density 29°C	ASTM D 1298	0.872	0.876	0.882	0.884	0.887

Available Packs: 20, 50, 210 Litres.

Shelf life: 36 months from the date of manufacturing.

* All related specifications are meets or exceeds.

Due to continual product research and development, the information contained herein is subject to change without notification. Typical Properties may vary slightly. The Material Safety Data Sheet (MSDS) are available upon request through our sales office.

1. PRODUCT AND COMPANY IDENTIFICATION

Product HYDROPLUS HLP TYPE
Supplier PETRELPLUS INC.
 One World Center, Tower One, 9th Floor, Senapati Bapat Marg, Lower Parel, Mumbai-400013, Maharashtra.
 Call # +91 22 6216 7072
 (Monday to Friday)
 Cell # +91 93522 25457
marketing@petrelplus.com
www.petrelplus.com

2. COMPOSITION

A composition of High-performance base oils and proprietary Additives.

3. HAZARDS IDENTIFICATION

FIRE -Flammable at high temperature.
HEALTH
 Eye contact -May cause mild irritation to the eyes upon direct contact.
 Skin contact -Prolonged contact may defat the skin or can cause dermatitis.
 Inhalation -hazards.
 Ingestion -Harmful if swallowed.

4. FIRST-AID MEASURES

Inhalation -Remove person to fresh air. Seek medical help if discomfort persists.
 Ingestion -Do not induce vomiting. Seek medical support.
 Skin Contact -Immediately flush skin with plenty of water for at least 15 minutes.
 Eye Contact -Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally.

5. FIRE-FIGHTING METHODS

Extinguishing media -Use dry chemical powder or carbon di – oxide or foam.
 Special protective equipment -Positive pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURE

Personal protection - Adequate ventilation, gloves, goggles, overalls and boots.
 Environmental precautions - Avoid entry into water courses.
 Clean up method - Absorb on inert material.

7. STORAGE AND HANDLING

Handling - Impervious gloves & eye protection ensure good ventilation. Keep away from source of ignition.
 Storage - Store in a cool & dry place.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory protection - Not required under normal conditions.
 Skin/hand protection - Impervious gloves, overalls, and boots.
 Eye protection - Use Goggles

9. TYPICAL PROPERTIES

Characteristics	HLP 32	HLP 46	HLP 68	HLP 100	HLP 150
ISO Viscosity Grade	32	46	68	100	150
Viscosity Index (min)	95	95	95	95	95
Flash Point, COC, °C, Min	220	222	232	232	240
Pour Point, °C, (max)	-22	-21	-21	-18	-18

10. STABILITY AND REACTIVITY

Stability	- Stable
Conditions to avoid	- Excessive temperatures
Materials to avoid	- Strong oxidizers
Hazardous decomposition products	- Oxides of carbon and nitrogen

11. TOXICOLOGICAL INFORMATION

Skin contact	- Possible irritation
Eye contact	- Possible irritation
Inhalation	- Not applicable
Ingestion	- Irritation. May cause lung damage.
Long term effect	- Not known

12. ECOLOGICAL INFORMATION

Mobility	- Mobile
Degradation	- Low
Accumulation	-Not expected
Short & Long Term effect	- Water pollutant

13. DISPOSAL CONSIDERATIONS

Dispose off according to local and national regulations.

14. TRANSPORT INFORMATION

CPL	- Not applicable
IMO	-Not applicable

15. REGULATORY INFORMATION

Symbol(s)	-Not applicable
Phrase(s)	- Not applicable
Phrase(s)	- Not applicable

16. OTHER INFORMATION: PRODUCT SAFETY

For safety reasons, it is IMPERATIVE that customer: -Ensure that all those within their control who use the products are supplied with all relevant information contained within the Material Safety Data Sheet and Technical Bulletin concerning the applications for which the product is designed and any instructions or warning.