

## **IPOL HYDROPAC HLP OILS**

### **Description:**

**IPOL Hydropac HLP oils** meeting ISO VG-32 to 150 requirements are blended using specially selected high viscosity index, chemically stable base oils and performance proven anti-wear, anti-oxidant, antirust additives. These are premium grade oils with outstanding thermal stability and high FZG rating.

### **Application:**

**IPOL Hydropac HLP oils** are extra heavy duty type of anti-wear hydraulic oils specially required for use in oil operated fluid power systems that are subjected to shock load, variables speed, for continuous operating conditions of high severity. These oils are also use for moderately loaded industrial gears, bearing and hydraulic devices with hydro-mechanical actuators. Recommended for use in high pressure hydraulic systems (5000 psi). These are not recommended for lubrication of turbines and equipments having silver coated components.

### **Performance Claims:**

IS 11656 - 1986 (Re-affirmed)  
DIN 51524 (Part II)  
Denison HF-0 and HF-2  
Vickers I-286-S3  
C&M P-69, P-70  
USS -127

### **Performance Benefits:**

1. Least wear of pump components, valves, cylinders, pistons etc.
2. Rust protection to system internals.
3. Good demulsibility to allow entrained water to settle down.
4. Longer service life through extension in oil change periods.

Typical Results: IPOL Hydropac oils

Product Data

Characteristics	Test Method	Results				
		HLP 32	HLP 46	HLP 68	HLP 100	HLP 150
Appearance	Visual	B R I G H T & C L E A R				
Viscosity at 40°C cSt	ASTM D 445	28.8 To 29.2	41.8 To 50.2	61.2 To 74.8	90 To 110	135 To 165
Viscosity Index (min.)	ASTM D 2270	98	95	95	95	95
Flash Point COC°C (Min.)	ASTM D 92	185	185	215	215	215
TAN mg KOH/gm (Max.)	IS:1448 P:2	1.0	1.0	1.0	1.0	1.0
Rust Preventive Characteristics	ASTM D 665B	Pass	Pass	Pass	Pass	Pass
Pour Point	ASTM D 97	-9	-6	-6	-3	-3
Emulsion Characteristics.	ASTM D 1401	40-37-3 (20)	40-38- 2 (20)	40-37- 3 (30)	40- 37.3 (30)	40-37- 3 (30)
Oxidation Test for 1000 Hrs.	ASTM D 943	Passes				
FZG - NIEMANN EP Test Pass Load stage	DIN 51354	10 <sup>th</sup> Min.				
Copper strip corrosion @ 100°C / 3 hrs	ASTM D 130	Not worse than no.1				

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