## PRODUCT DATA SHEET



## CIRCULATION AND HYDRAULIC OILS (HLP) PHYDOL HLP - 32, 46, 68,100

These are high performance heavy-duty oils, primarily intended for applications where oil is used for extended period in circulation & hydraulic systems in wide range of industrial equipment and subjected to wide variations in ambient and operating temperatures. They possess good demulsibility that permits water and other contaminants to separate readily from the oil in the system reservoir. They are incompressible and remain in a fluid enough state to allow effective power transmission besides having outstanding antiwear, antirust, good air release, anti-foam, and oxidation resistance properties.

**Recommended** for use in hydraulic systems employing gear, vane, radial and axial piston pumps where anti-wear hydraulic fluids are required and clearances are relatively large. Due to their low pour point, they are recommended for sophisticated high performance electro-hydraulic or numerically controlled systems. They are also recommended for use in hydraulic couplings, injection moulding machineries, certain screw compressors and vacuum pumps handling air and inert gases provided the discharge temperatures do not exceed 150°C. They are suitable as multipurpose lubricants in systems and perform well at the elevated temperatures but not suitable for shock loading and extreme pressure.

**PERFORMANCE LEVEL:** IS 11656-1986 (Reaffirmed1993), DIN 51524 Part-2, US Steel 127, Dension HF-0&HF-2, Cincinnati Milacron P-68, P-69, P-70 specifications. It also passes Vickers Vane Pump Test.

CHARACTERISTICS					
S. NO.	PROPERTIES	PHYDOL HLP			
		32	46	68	100
1.	Kinematic Viscosity, cSt @ 40°C	29-35	42-50	64-72	90-110
2.	Viscosity Index, min.	90	90	90	90
3.	Flash Point, COC, °C, min.	180	180	180	180
4.	Pour Point, °C, max.	-18	-15	-12	-9
5.	Copper Strip Corrosion, @100°C	1	1	1	1
	for 3 Hrs. (max.)				
6.	FZG Pass Load Stage, min.	10	10	10	10
7.	Rust Properties	Pass			
	(ASTM D 665, 24/hrs.)				
8.	Zinc, % wt. (ICP Emission)	0.048 - 0.055			
9.	Phosphorus, % wt (ICP Emission)	0.038 - 0.043			

<sup>\*</sup> The specifications are subject to variations/ development / customization.

**PACKING:** 210L, 50L, 20L