

# VKB Petroleum Hydraulic Oils HLP

#### PRODUCT DESCRIPTION

**VKB petroleum Hydraulic Oils HLP** are one of high-quality hydraulic oils, formulated to meet the requirements of hydraulic systems using high pressure, servo valves requiring highly efficient filtration such as proportional valves, and machine tools found in most hydraulic systems

### Features.

- Anti-wear properties
- Good thermal stability
- Excellent filterability
- Excellent resistance to hydrolysis.
- Anti-foaming, and De-aeration properties.
- De-Emulsification properties
- Very low pour point.
- Guarantees longer components lifetime

## VKB petroleum Hydraulic Oils HLP Applications

- Hydraulic systems where sludge can be formed with daily processes.
- Hydraulic systems with high loads that require lubrication, and anti-wear protection.
- Circulation lubrication in which low-power reduction gears, bearings, and rotary air-compressors.
- Presence of unavoidable mist through hydraulic system.

#### Performance level

• AFNOR: NF E 48-603 HM

• AFNOR: NF E 48-690

• AFNOR: NF E 48-691

• CINCINNATI: MACHINE P-69 (ISO 68)

• DENISON: HF-2 HLP

• DIN: 51524 Part 2

• EATON VICKERS: I-286-S

• EATON VICKERS: M-2950-S

• ISO: 11158, HM

ISO: 6743-4, HM

### TYPICAL TECHNICAL DATA

Property	Test	Units	HLP 10	HLP 32	HLP 46	HLP 68
Nature	-	-	Mineral	Mineral	Mineral	Mineral
Color	ASTMD1500	-	Blonde	Blonde	Blonde	Blonde
Grade	-	-	ISO 22	ISO 32	ISO 46	ISO 68
Density @ 15° C	ASTM D1298	-	0.88	0.88	0.90	0.905
Viscosity @ 40° C	ASTM D445	mm <sup>2</sup> /s	19.8-24.2	28.8-35.2	41.4-50.6	61.2-74.8
Viscosity @ 100° C	ASTM D445	mm2/s	2.7	5.7	7	9.1
Viscosity Index	ASTM D2270	-	110	110	110	110
Flash Point	ASTM D93	° C	220	222	223	223
Copper Strip Test	ASTM D130	° C	1B	1B	1B	1B
Filterability	PL	Indices	1.1	1.1	1.1	1.1
VICKERS Test V104C	-	quotatio	Pass	Pass	Pass	Pass
VICKERS Test 35VQ25	-	quotatio	Pass	Pass	Pass	Pass
FZR gear failure (stage)	DIN51354-2	Min	10	10	10	10