



## PRODUCT DATA SHEET

### **EKO HYDROLUB HVLP** High viscosity index hydraulic systems oils

#### **DESCRIPTION**

EKO HYDROLUB HVLP range includes hydraulic systems oils with additives against oxidation, corrosion and wear that are characterised by high viscosity index and low pour point, specifically designed for high pressure hydraulic systems operating in a broad temperature range.

EKO HYDROLUB HVLP range lubricants present excellent rheological characteristics in temperatures below zero and high resistance to shear and to viscosity reduction under high pressure conditions and high operating temperatures.

#### **SPECIFICATIONS**

DIN 51524 part 3 HVLP, ISO 11158 HV, ASTM D6158 HV, Eaton Brochure 03-401-2010, Eaton Lubricant Specification E-FDGN-TB002-E, Fives Cincinnati P-68, P-69, P-70, GM LS-2 Antiwear Hydraulic Oil, JCMAS HK P041, Parker Denison HF-1, HF-2, HF-0, Swedish Standard SS 155434: 2015, US Steel 126.

#### **APPLICATIONS**

- Hydraulic systems operating under a broad range of temperatures.
- Applications in very low environmental temperatures and in hot climates.
- High pressure hydraulic systems in applications of earthworks equipment, in industrial and marine applications.

#### **ADVANTAGES**

- Less changes in viscosity due to temperature changes, as compared to HLP hydraulic oils.
- Improvement of the system's energy performance (easier start at low temperatures and lower viscosity loss in high operational temperatures).
- Excellent protection against cavitation and the creation of deposits and sludge.
- Excellent filtering properties.



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### ADVANTAGES

- Excellent wear protection, protection against corrosion and rust.
- Very good air release properties.

### TYPICAL CHARACTERISTICS

Properties	Methods	Units	EKO HYDROLUB				
			HVLP 15	HVLP 32	HVLP 46	HVLP 68	HVLP 100
ISO Viscosity Grade	-	-	15	32	46	68	100
Density, 15°C	ASTM D4052	g/ml	0.858	0.867	0.877	0.886	0.888
Kinematic Viscosity, 40°C	ASTM D445	cSt	15	30.38	49.84	69.85	94.88
Kinematic Viscosity, 100°C	ASTM D445	cSt	3.700	6.231	8.82	10.71	13.46
Viscosity Index (VI)	ASTM D2270	-	140	161	158	142	142
Copper Corrosion, 3 hours @ 100°C	ASTM D130	Rating	1a	1a	1a	1a	1a
Rust-preventing Characteristics	ASTM D665 A/B	-	Pass/Pass	Pass/Pass	Pass/Pass	Pass/Pass	Pass/Pass
Foaming Characteristics, Seq. I/II/III Tendency/ Stability	ASTM D892	ml	0/0	0/0	0/0	0/0	0/0
Water Separability, time to 40-40-0 (ml)	ASTM D1401	min	20	20	20	20	20
Pour Point	ASTM D5950	°C	-42	-46	-42	-42	-39
Flash Point, COC	ASTM D92	°C	188	220	222	226	230
FZG gear test, A 8.3 / 90 visual damage-load stage	DIN 51354, part 2	Fail Stage	-	>12	>12	>12	>12

### SPECIAL INSTRUCTIONS

Mixing of EKO HYDROLUB HVLP hydraulic oils with engine oils may lead to foaming, creation of deposits and filter clogging.

### HEALTH AND SAFETY

Protect the environment while disposing of used product. Used lubricants should be collected at specific points to ensure they do not pollute the environment. Do not mix with solvents, brake fluids, antifreeze and water, to allow for proper handling.

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This data sheet provides basic information on the product as at the date of drafting. For further information regarding applications, please contact EKO ABEE Technical Support, tel. +30 210 5509 511. Advice on safe handling is provided in the Safety Data Sheet.