



WORLD CLASS LUBRICANTS  
FOR TROPICAL CONDITIONS

# Hydraulic Oil HV

## GENERAL

The **Ultra Hydraulic Oils HV** range of lubricants are premium grade lubricants designed to provide outstanding lubrication of vane and piston pumps, actuators, control valves and hydraulic systems.

**Ultra Hydraulic Oils HV** are manufactured from high viscosity-index hydro-treated base oils, which contain lower levels of impurities, and are blended with an advanced additive package. Without these impurities, that limits the performance of conventional base oils, the use of **Ultra Hydraulic Oils HV** result in:

- Anti-wear performance
- Oxidation/thermal stability
- Corrosion protection
- Filterability
- Anti-foam properties
- Demulsibility

## KEY BENEFITS

The use of **Ultra Hydraulic Oil HV** would result in:

- Less downtime, reduced maintenance and longer component life.
- Minimizing of harmful sludge and emulsions.
- Longer oil service life, with reduced costs.
- Provision of superior anti-wear protection even under increasing bulk temperatures.

## MAIN APPLICATIONS

- Hydraulic transmissions and control systems in mobile, marine and industrial applications.
- Systems operating under hot conditions e.g. plastic injection molding machines.
- Systems that are subjected to wide variations of ambient temperature, or where a narrow viscosity span is required.

It is **not designed** for use in older design silver-plated pumps (e.g. old Lucas Pumps).

## PERFORMANCE SPECIFICATIONS

The **Ultra Hydraulic Oil HV** range of lubricants meets or exceeds the requirements for:

- Denison HF-1, HF-2, HF-0
- Eaton Vickers M-2950-S / I-286-S
- Cincinnati Machine P-68, P-69, P-70
- DIN 512524 Part 2
- USS 136, 127
- General Motors LS-2 LH-03 / LH-04 / LH-06
- AFNOR E 48-603

## **TYPICAL PROPERTIES**

	TEST METHOD					
ISO Viscosity Grade	ISO 3448	32	37	46	68	100
Kin. Viscosity @ 40°C, cSt	ASTM D445	32.0	37.0	46.0	68.0	100.0
Kin. Viscosity @ 100°C, cSt	ASTM D445	6.78	7.30	8.93	11.25	11.15
Viscosity Index	ASTM D2270	178	163	179	159	153
Specific Gravity 60/60°F	ASTM D1298	0.8662	0.8682	0.8730	0.8776	0.8811
Colour	ASTM D1500	<0.5	<1.5	<0.5	<0.5	<0.5
Pour Point, °C	ASTM D97	-30	-45	-30	-30	-33
Closed Flash Point, °C	ASTM D93	166	192	179	232	236
Neutralization No.	ASTM D974	0.4	0.4	0.4	0.4	0.4
Rust Prevention						
Distilled Water	ASTM D665A	Pass	Pass	Pass	Pass	Pass
Synthetic Sea Water	ASTM D665B	Pass	Pass	Pass	Pass	Pass
Copper Corrosion	ASTM D130	1A	1A	1A	1A	1A
Water Separation time in mins. (@ 54°C)	ASTM D1401	10	10	10	10	-
(@ 82°C)		-	-	-	-	10
Foaming Tendency/Stability	ASTM D892					
Stage 1 ml. @ 24°C		5/0	5/0	5/0	5/0	0/0
Stage 11 ml. @ 93.5°C		10/0	10/0	10/0	10/0	25/0
Stage 111 ml. @ 24°C after Stage 11		10/0	10/0	10/0	10/0	5/0

## **HEALTH AND SAFETY**

Ultra Hydraulic Oil HV is unlikely to pose any health or safety hazards when used in the recommended applications, provided good standards of personal and industrial hygiene are observed. Please refer to Material Safety Data Sheet (MSDS) for further information.