



## Hydraulic Oil

# HVI 46, 68

## Application

EnviroLube HVI 46 and 68 are shear stable, multigrade high viscosity index hydraulic fluids designed for use in hydraulic systems with high operating temperatures.

## Features

EnviroLube HVI 46 and 68 are formulated to minimise corrosion, oxidation, foaming and machinery wear for use in highly stressed gear, vane and piston type hydraulic systems where high levels of anti-wear performance are needed.

They also contain a shear stable Viscosity Modifier which maintains a higher viscosity at elevated temperatures compared to normal hydraulic oils. With conventional hydraulic fluids in systems with high working temperatures (>100°C), the fluid viscosity can be reduced to levels which can cause rapid wear or equipment seizure. EnviroLube HVI fluids incorporate polymers to maintain adequate viscosity at high working temperatures

As with other EnviroLube hydraulic oils, the HVI range meets the performance specifications of leading manufacturers of hydraulic equipment.

## Benefits

- ✓ High Viscosity Index to maintain fluid film at elevated temperatures
- ✓ Outstanding thermal & oxidative stability and superior hydrolytic stability
- ✓ Excellent demulsibility and de-aeration
- ✓ Excellent rust protection
- ✓ Low filter blockage tendency
- ✓ Excellent wet & dry filterability
- ✓ Manufactured in an ISO 9002 accredited facility
- ✓ Double refined base oils conserve vital petroleum resources



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## Safety

Your safety is important to EnviroOil. This material is classified as non-hazardous according to Worksafe Australia. However, it is recommended that the handling instructions in the Material Safety Data Sheet be followed to avoid risk of injury or irritation from exposure.

## Specifications

DIN 51524, Part 2	ISO 6743/4	Denison HF-1, HF-2, HF-0
Eaton-Vickers I-286-S (Industrial Hydraulics)	Jeffrey No. 87	U.S. Steel 136, 127
Eaton-Vickers M-2950-S (Mobile Hydraulics)	Bosch/Racine, variable volume vane pumps	Ford M-6C32
Eaton-Vickers M-2952-S (Mobile Hydraulics)	Cincinnati Machines P-68, P-69, P-70	B.F. Goodrich 0152
	General Motors LH-04-1, LH-06-1, LH-15-1	Commercial Hydraulics**

## Typical Characteristics

Characteristic	Method	Units	ISO 46	ISO 68	Benefit
Density @ 15.6C	IP160	g/cm3	0.87	0.88	Maintains fluid viscosity at high operating temperatures
Kinematic Viscosity @ 40C	ASTM D445	cSt	46	66	
Viscosity Index	ASTM D2270		150	150	
ISO Cleanliness	ISO 4406		17/15	17/15	ISO 17/15 will result in a gain in the average time between breakdowns, compared with a level of 22/19
Steel Corrosion	ASTM D665		Pass	Pass	Easily passes limits for protection of all metal components under thermal load
Copper - Sludge & Corrosion	ASTM D4310		Pass	Pass	
Aniline Point	ASTM D611	°C	102	102	Good seal compatibility.
Foam Tendency/Stability Seq II	ASTM D892	mls/mls	30/0	30/0	Reduces any air entrapment
Air Release	ASTM D3427	mins	7	7	
FZG Gear Test	IP 334	Failure Stage	>12	>12	Excellent extreme pressure properties for protection against pitting & scuffing of lightly loaded gears

Values provided are typical and do not constitute a specification