



Hi-Tec Oil Traders Pty Ltd ABN 28 053 837 362

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PRODUCT DATA SHEET

HYDRAULIC HVI ZF 46

PRODUCT DESCRIPTION

Hydraulic HVI ZF 46 is a specialised premium zinc-free, high viscosity index hydraulic oil which has been formulated to handle extremes of operating temperatures, pressures, power densities and fluid flow rates that are associated with very high horse-power hydraulic systems. The oil provides unique, long life operating service characteristics by a combination of anti-wear, detergent and very shear stable viscosity-improving additives with proven rust, oxidation, corrosion and foam inhibitors. **Hydraulic HVI ZF 46** ensures excellent filterability with hydrolytic and demulsibility stability.

Hydraulic HVI ZF 46 is not normally recommended as a lubricant for compressors, circulating systems, bearings, general purpose lubrication and enclosed gears where extreme high-pressure load characteristics are not required. For these applications, use Hi-Tec Compressor Oils.

BENEFITS

The anti-wear additives in **Hydraulic HVI ZF 46** ensures special protection where very high pressures, power densities and temperatures are inherently experienced with high horse-power hydraulic pumps operating at pressures up to 28,000 kPa (4000 psi). This fluid allows hydraulic systems to give long, trouble-free service when operating with the increased horsepower, increased temperatures, reduced oil volume reservoirs and resultant reduced de-aeration times.

Hydraulic HVI ZF 46 possesses excellent filterability even in the presence of moisture contamination where other lubricants may cause deposition products which plug filter systems (formed as a result of hydrolytic instability particularly with non-ferrous hydraulic components). This may lead to pump starvation and ultimately premature wear, cavitation and equipment failure.

Hydraulic HVI ZF 46 is a multi-grade oil, unlike the more conventional fluids, have smaller viscosity changes with temperature variations. At very high operating temperatures experienced in high horsepower hydraulic systems, this property results in improved full-bodied, wear reducing, lubricating films compared to the thinned-out fluidity of the more conventional hydraulic fluids. This special viscosity control property is maintained by the very high shear stable viscosity improver (VI) incorporated in **Hydraulic HVI ZF 46** where other lesser VIs would shear down to less wear-protective thinned-out fluids and thus shorten the life of the hydraulic equipment.

The high aniline point of **Hydraulic HVI ZF 46** ensures good compatibility with synthetic rubbers, giving extended life to seals. The powerful anti-oxidation inhibitors of **Hydraulic HVI ZF 46** reduces oxidation so that degradation is inhibited, thereby reducing corrosion related problems of shortened hydraulic life, erratic control valve operation, filter plugging, down time and so on.

Hydraulic HVI ZF 46 has multi-metal compatibility with the ability to control wear and corrosion of copper and aluminium alloys used in high performance pumps. Corrosion inhibitors and metal passivators formulated in these fluids, in severe operating service, prevent corrosion of steels and the above more easily attacked metals.

The anti-foam additive in **Hydraulic HVI ZF 46** ensures any entrained air will quickly separate from the fluids so that wear producing metal-to-metal contact is avoided.



AUSTRALIAN FAMILY OWNED SINCE 1989





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SPECIFICATIONS

Hydraulic HVI ZF 46 meets or exceeds the following demanding performance requirements:

Vickers I-286-S, M-2950-S

Hagglunds-Denison HF-0, HF-1, HF-2

DIN 51524, Part 2

US Steel 136, 127

VDMA 24318

AFNOR NFE 48-603 (HM)

Cincinnati Milacron P-70

ISO 6743/4 (HM)

SEB 181 222

SS155434

Hi-Tec Oils suggests that the equipment manufacturers' recommendations for viscosity grade, performance requirements and general operating conditions should be checked prior to use.

TYPICAL PROPERTIES

Property	ASTM Method	Results
ISO Viscosity Grade	-	46
Density (kg/Lt) @ 15°C	D-1298	0.856
Viscosity (cSt) @ 40°C	D-445	46.0
@ 100°C	D-445	7.8
Viscosity Index	D-2270	139
Flash Point, COC (°C)	D-92	215
Pour Point (°C)	D-97	-25
Foaming Characteristics - All Sequences after Settling	D-892	Nil
Oxidation Characteristics - Hours to TAN 1.5	D-943	1500
Rust Prevention, Salt Water - After 48 hours	D-665B	Pass
Carbon Residue, Conradson (% wt)	D-524	0.04
FZG Gear Load, Stages Passed	DIN 51354/2	12

Available in: Bulk, 1000 Litres, 200 Litres and 20 Litres

"Hi-Tec Oil Traders Pty Ltd (Hi-Tec Oils) has endeavoured to ensure that all information, representations and specifications contained in this product data sheet are accurate at the time of publication. This general information should be used in conjunction with appropriate inquiries by users of the product including consultation with the vehicle or equipment manufacturers published information.

It is the responsibility of users of the product to use the product safely. Users should consult the safety data sheets for each product at www.hi-tecoils.com.au. Hi-Tec Oils takes no responsibility for injury or damage if the product is used in an inappropriate or unsafe manner.

Our product warranty and product quality statement can be viewed at www.hi-tecoils.com.au"

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