



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

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PRODUCT DATA SHEET

HYDRAULIC HVI BLUE FLUIDS

PRODUCT DESCRIPTION

Hydraulic HVI Blue Fluids are specialised premium hydraulic fluids which have been formulated to handle extremes of operating temperatures, pressures, power densities and fluid flow rates which are associated with very high horse-power hydraulic systems. The oils provide 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 Blue Fluids** ensure excellent filterability with hydrolytic and demulsibility stability.

Hydraulic HVI Blue Fluids are 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

WEAR PREVENTION. The anti-wear additives in **Hydraulic HVI Blue Fluids** ensure 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). These oils allow hydraulic systems to give long, trouble-free service when operating with the increased horse-power, increased temperatures, reduced oil volume reservoirs and resultant reduced de-aeration times.

Hydraulic HVI Blue Fluids possess 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 Blue Fluids are multi-grade oils, unlike the more conventional fluids, have smaller viscosity changes with temperature variations. At very high operating temperatures experienced in high horse-power 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 Blue Fluids**, 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 Blue Fluids** ensures good compatibility with synthetic rubbers, giving extended life to seals. The powerful anti-oxidation inhibitors of **Hydraulic HVI Blue Fluids** reduce oxidation so that degradation is inhibited, reducing corrosion related problems of shortened hydraulic life, erratic control valve operation, filter plugging, down time and so on.

Hydraulic HVI Blue Fluids have 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. While formulated with a low zinc formula, it is NOT recommended for silver components used in Lucas PM pumps. For these products, use the Hi-Tec ZF range of products.

The anti-foam additive 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 Blue Fluids meet or exceed the following demanding performance requirements:

- Vickers I-286-S, M-2950S
- Racine-Variable volume vane pumps
- DIN 51524, Part 2
- AFNOR N FE 48-691 (wet)
- SS 155434;
- ISO 6743/4 (HM, HV)
- AFNOR N FE 48-603 (HM, HV)
- Hagglunds-Denison HF-1, HF-2, HF-0
- Fives Cincinnati P-68, P-69, P-70
- US Steel 127, 136
- VDMA 24318
- SEB 181 222
- Eaton Brochure 03-401-2010
- Other commercial hydraulics

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

TYPICAL PROPERTIES

| Property | Units | ASTM Method | Results | | | | |
|--|---------------|--------------|---------|-------|-------|-------|-------|
| ISO Viscosity | | - | 22 | 32 | 46 | 68 | 100 |
| Item Code (HI5-) | | - | 2739A | 2740 | 2742 | 2744 | 2746 |
| Density @ 15°C | kg / L | D-1298 | 0.855 | 0.863 | 0.879 | 0.887 | 0.883 |
| Viscosity @ 40°C | cSt | D-445 | 22 | 32 | 46 | 68 | 100 |
| Viscosity @ 100°C | cSt | D-445 | 4.7 | 6 | 7.8 | 10.2 | 13.4 |
| Viscosity Index | | D-2270 | 136 | 136 | 139 | 135 | 133 |
| Flash Point | °C | D-92 | 200 | 207 | 215 | 228 | 233 |
| Pour Point | °C | D-97 | -27 | -25 | -25 | -25 | -21 |
| Foaming Characteristics- All sequences after settling | | D-892 | Nil | Nil | Nil | Nil | Nil |
| Oxidation Characteristics- Hours to TAN 1.5 | | D-943 | 1500 | 1500 | 1500 | 1500 | 1500 |
| Rust Prevention, Salt Water After 48 hours | | D-665 B | Pass | Pass | Pass | Pass | Pass |
| Carbon Residue | | D-524 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| Conradson (% wt) | | | | | | | |
| FZG Load Test | Stages Passed | DIN 51534/12 | 12 | 12 | 12 | 12 | 12 |

Available in: Bulk, 1000 Litres, 200 Litres, 20 Litres and 5 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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