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PRODUCT DATA SHEET

XHVI HYDRAULIC OILS 15 - 100

PRODUCT DESCRIPTION

XHVI Hydraulic Oils are specialised premium hydraulic fluids which have been formulated to handle the extremes of operating temperatures, pressures, power densities and fluid flow rates which are associated with very high horsepower 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. **XHVI Hydraulic Oils** ensure excellent filterability with hydrolytic and demulsibility stability.

BENEFITS

The anti-wear additives in **XHVI Hydraulic Oils** ensure special protection where inherently high pressures, power densities and temperatures are experienced with high horsepower hydraulic pumps operating at pressures up to 48,000 kPa (7000 psi). These oils allow hydraulic systems to provide long, trouble-free service when operating with this increased horse-power, increased temperatures, reduced oil reservoir volumes and resultant reduced de-aeration times.

XHVI Hydraulic Oils possess excellent filterability even in the presence of moisture contamination; whereas other lubricants may have deposition products (formed as a result of hydrolytic instability particularly with non-ferrous hydraulic components) which plug filter systems leading to pump starvation, cavitation and ultimately premature equipment wear and failure.

XHVI Hydraulic Oils are multi-grade oils which have smaller viscosity changes with temperature variations than the more conventional fluids. At the very high operating temperatures experienced in high horsepower hydraulic systems, this property results in improved full-bodied, wear reducing, lubricant films compared to the thinned-out fluidity of the more conventional hydraulic fluids. This special viscosity control property is maintained by the very shear stable viscosity improver (VI) incorporated in **XHVI Hydraulic Oils**, when other lesser VIs would shear down to less wear-protecting thinned-out fluids shortening the life of the hydraulic equipment.

The high aniline point of **XHVI Hydraulic Oils** ensures excellent compatibility with synthetic rubbers, providing extended life to seals.

The powerful oxidation inhibitors of **XHVI Hydraulic Oils** reduce oxidation so that oil degradation is inhibited, thereby reducing the corrosion related problems of shortened hydraulic fluid life, erratic control valve operation, filter plugging, down time, etc.

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

XHVI Hydraulic Oils 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 prevent corrosion of steels and the previously mentioned more easily attacked metals in severe operating service conditions. While formulated with a low zinc formula, **XHVI Hydraulic Oils** are NOT recommended for use with <u>silver</u> components as found in Lucas PM pumps. For these situations, use the Hi-Tec Zinc Free Hydraulic Oils.

XHVI Hydraulic Oils 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 <u>Hi-Tec Compressor Oils</u>.







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SPECIFICATIONS

XHVI Hydraulic Oils meet or exceed the requirements of many international tests and specifications for industrial and mobile hydraulic systems including:

Eaton Brochure 03-401-2010 Vickers I-286-S, M-2950S Denison HF-1, HF-2, HF-0 Cincinnati Milacron P-68, P-69, P70 DIN 51524, Part 2 and 3 SEB 181 222 AFNOR NFE 48 603 (HM, HV) VDMA 24318 SS 155434 ISO 6743/4 (HM, HV) US Steel 127, 136 AFNOR N FE 48-691 (wet) ASTM-D2619 HF-0

Other commercial hydraulics.

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 | Typical Results | | | | | |
|-------------------------------|-------------|-----------------|-------|-------|-------|-------|-------|
| ISO Viscosity Grade | | 15 | 22 | 32 | 46 | 68 | 100 |
| Item code (HI5-) | | 2675 | 2739 | 2741 | 2743 | 2745 | 2747 |
| Density (kg/Lt) @ 15°C | D-1298 | 0.838 | 0.841 | 0.869 | 0.863 | 0.871 | 0.875 |
| Viscosity (cSt) @ 40°C | D-445 | 15 | 22 | 32 | 46 | 68 | 100 |
| @ 100°C | D-445 | 3.8 | 4.88 | 6.38 | 8.4 | 11 | 14.8 |
| Viscosity Index | D-2270 | 151 | 150 | 156 | 161 | 153 | 154 |
| Flash Point, COC (°C) | D-92 | 198 | 201 | 207 | 215 | 228 | 229 |
| Pour Point (°C) | D-97 | -36 | -36 | -36 | -36 | -36 | -33 |
| Colour | D-1500 | 1 | 1 | 1 | 1 | 1 | 1 |
| Foaming Characteristics - | | | | | | | |
| All Sequences after Settling | D-892 | Nil | Nil | Nil | Nil | Nil | Nil |
| Oxidation Characteristics - | | | | | | | |
| Hours to TAN 2.0 | D-943 | 2068 | 2068 | 2068 | 2068 | 2068 | 2068 |
| Rust Prevention, Salt Water - | | | | | | | |
| After 48 hours | D-665B | Pass | Pass | Pass | Pass | Pass | Pass |
| Zinc (% wt) | IP 308 | 0.028 | 0.03 | 0.03 | 0.03 | 0.042 | 0.03 |
| Sulphated Ash (% wt) | D-874 | 0.056 | 0.06 | 0.06 | 0.06 | 0.084 | 0.06 |
| Hydrolytic Stability | D-2619 | Pass | Pass | Pass | Pass | Pass | Pass |
| FZG Gear Load, Stages Passed | DIN 51354/2 | 11 | 11 | 11 | 11 | 11 | 11 |

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 $\underline{\text{www.hi-tecoils.com.au}}"$

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