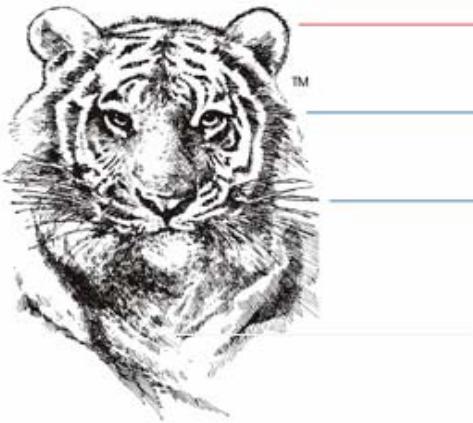


# Product Data Sheet

## UNIVIS HVI



### EXCEPTIONALLY HIGH VI, HYDRAULIC OIL

April 2009

**UNIVIS HVI** is a line of premium performance anti-wear hydraulic oils with an exceptionally high Viscosity Index (VI). With the following features and benefits:

- ◆ Very high VI provides resistance to viscosity change with temperature.
- ◆ Excellent flow at sub-zero temperatures
- ◆ Very good anti-wear protection in high pressure vane pumps.
- ◆ Excellent oxidation stability allows extension of oil filter change intervals while assuring clean systems.
- ◆ Very low pour points maintains excellent fluidity conditions at low temperatures
- ◆ High performance and smooth hydraulic operations derived from uniform viscosity control, fast air release, very good foam control
- ◆ Exceptional rust and corrosion protection reduces the negative effects of moisture on system components.

#### ***Product Description***

Univis HVI oils are engineered to maintain close viscosity control over wide temperature range applications. Because of their resistance to viscosity change, Univis HVI oils are recommended for hydraulic systems that are subject to wide temperature variations. Many of these systems are sensitive to changes in viscosity of the hydraulic oil, since they depend on uniform viscosity for hydraulic accuracy. They exhibit optimum flow characteristics at sub-zero temperatures and the oils are resistant to shearing and viscosity loss so that system efficiency is maintained and internal pump leakage is minimized at high operating temperatures and pressures. These high quality hydraulic oils also provide very good anti-wear protection for high-pressure vane, piston and gear pumps.

The Univis HVI oils are designed with excellent oxidation stability reducing deposit formation and improving pump and valve performance. They were developed in conjunction with the major OEMs to meet the stringent requirements of severe hydraulic systems using high pressure, high output pumps as well as handling the critical requirements of other hydraulic system components.

#### ***Primary Applications***

The High Viscosity Index is an indication of Univis HVI oils outstanding viscosity control over a wide temperature ranges making these hydraulic oils particularly suited for equipment subjected wide seasonal temperature variations.

Applications include truck mounted mobile hydraulic systems, hydrostatic transmissions, dash pots, fluid systems for numeric controlled lathes, and automatic screw machines. They can also be used in fine instruments and other mechanisms where power input is limited and increases in torque due to the lubricant thickening cannot be tolerated.

They can be used in critical systems to reduce deposit formation where close clearance servo-valves are used.

### **Precautions**

UNIVIS HVI 13 AND UNIVIS HVI 26 are premium hydraulic oil manufactured from high quality petroleum base stocks, carefully blended with selected additives. As with all petroleum products, good personal hygiene and careful handling should always be practiced. Avoid prolonged contact to skin, splashing into the eyes, ingestion or vapour inhalation. Please refer to the Material Safety Data Sheet for further information.

Note: This product is not controlled under Canadian WHMIS legislation.

### **Typical Properties**

	Univis HVI 13	Univis HVI 26
Colour	Red	Red
Kinematic Viscosity		
cSt @ 40°C	13.5	25.8
cSt @ 100°C	5.3	9.3
cSt @ -40°C	750	896
cSt @ -54°C	4400	-
Viscosity Index, ASTM D 2270	404	376
Copper Strip Corrosion, ASTM D 130	1A	1A
Pour Point, °C, ASTM D 97	<-66	-60
Flash Point, °C, ASTM D 92	102	103

*The values shown above are representative of current production. Some are controlled by manufacturing and performance specifications while others are not. All may vary within modest ranges.*