# **KOYOTO TITAN HYD HVI ZF SERIES**

High Viscosity Index, Zinc Free Ashless Anti-Wear Hydraulic fluids



### **Product Data Sheet**

#### **Product Description**

KOYOTO TITAN HYD HVI ZF range of lubricants are high viscosity index Zinc Free Ashless anti-wear hydraulic fluids formulated with high quality HVI base stocks and advanced very low ash anti-wear additive technology. They are designed to work efficiently in hydraulic & fluid power transmission systems, subjected to wide temperature ranges operating under severe conditions. These oils are available in ISO viscosity grades from 15 to 150. Moreover, they are also designed to work in systems where high hydrolytic stability is required, even in presence of high moisture content in hydraulic systems.

### **Features & Benefits**

- Very high viscosity index and excellent shear stability, ensures long pump life under extreme conditions.
- Excellent demulsibility property of oil protects hydraulic systems from small quantities of moisture and also separates readily from larger quantities of water.
- Excellent anti-wear properties and outstanding film strength provides exceptional equipment protection, that not only results in fewer breakdowns but also helps improve production efficiency.
- Excellent protection from rust and corrosion of multi-metallurgy system components, especially in Hydraulic systems with Silver (Ag) components.
- Good anti-foam and air release characteristics, designed by using silicon free additive components.

## Specifications

## KOYOTO TITAN HYD HVI ZF series meets or exceeds following International and Builder specifications:

- DIN 51524 Part 3 HVLP type
- Denison HF-0, HF-2 (T6H20C)
- Cincinnati Machine P68, P69, P70
- ISO 6743/4 HV
- VICKERS M-2950S, -I-286
- VICKERS 35VQ25, 104C

## **Application**

## These HVI ZF oils are designed for use in Hydraulic applications subjected to wide temperature variations.

- Suitable for use in hydraulics of Marine, Industrial & Earth moving; where temperatures vary seasonally.
- Applications where HVI anti-wear lubricant is required: servicing gears & bearings, air compressors etc.,

#### **Typical Characteristics**

KOYOTO TITAN HYD HVI ZF	<b>Test Method</b>	Units	22	32	46	68
ISO Viscosity Grade	ISO 3448	-	22	32	46	68
Density @ 15 °C	ASTM D 4052	gm/cc	0.86	0.870	0.870	0.875
Viscosity @ 40 °C	ASTM D 445	cSt	22.9	32.4	46.8	68.9
Viscosity @ 100 °C	ASTM D 445	cSt	5.3	7.10	9.76	13.4
Viscosity Index	ASTM D 2270	-	175	190	200	200
Pour Point	ASTM D 97	°C	-36	-36	-36	-36
Flash Point (COC)	ASTM D 92	°C	204	215	215	220
Copper Strip Corrosion	ASTM D 130	-	1B	1B	1B	1B
Rust Characteristics Proc B	ASTM D 665	-	Pass	Pass	Pass	Pass
Foam Seq I,II,III	ASTM D 892	ml/ml	10/0	10/0	10/0	10/0
Demulsibility, 40/40/0	ASTM D 1401	min	10	10	10	10
TAN, mg KOH/g	ASTM D 2896		0.4	0.4	0.4	0.4

The above figures are typical of blends with normal production tolerance and do not constitute a specification.