# **KOYOTO TRANS HD 10W SERIES**

**Heavy Duty Transmission and Drivetrain Oils** 



### **Product Data Sheet**

#### **Product Description**

KOYOTO Trans HD 10W series is a range of extra high performance transmission and drive train oils, formulated with high quality base stocks and advanced additive system to meet or exceed the requirements of Caterpillar TO-4 specification. Suitable to provide heavy duty performance benefits in power shift transmissions, gearboxes, final drives and high pressure hydraulic applications. It helps in maximizing the productivity in construction, quarrying and mining equipment operating under severe conditions.

#### **Features & Benefits**

- Balanced static and dynamic friction coefficients, helps in optimizing clutch friction retention and control of slippage. Thus ensuring increased load carrying capacity & improvement in clutch life.
- Good compatibility with various clutch materials and elastomers.
- Excellent foam control property enhances performance of wet brakes by controlling brake chattering.
- Outstanding oxidation & thermal stability reduces high pressure hydraulic pump wear and minimizes sludge build keeping the application clean.
- Outstanding anti-wear protection & load carrying capabilities, helps in reducing wear and extends the life of gearboxes, final drives and transmissions.

### **Specifications**

## KOYOTO Trans HD 10W series meets or exceeds following International and Builder specifications:

- Caterpillar TO-4
- Allison C-4
- Vickers M-2950-S

## **Application**

- Suitable for use in heavy duty transmissions, gear boxes, final drives and hydraulic systems used in offhighway applications.
- Off-highway applications including: mining, agriculture, construction and quarrying.
- Suitable for certain manual, powershift and automatic transmissions where Allison C-4 fluids (SAE 10W & 30 grades) are recommended.
- Hydraulic applications in most of mobile equipment.

#### **Typical Characteristics**

<b>KOYOTO Trans HD</b>	Test Method	Units	10W	30	50	60
Density @ 15 °C	ASTM D 4052	gm/cc	0.880	0.892	0.904	0.910
Viscosity @ 100 °C	ASTM D 445	cSt	5.6	11.6	20.5	25.6
Viscosity @ 40 °C	ASTM D 445	cSt	35	108	254	356
Viscosity Index	ASTM D 2270	-	96	95	95	95
Pour Point	ASTM D 97	°C	-33	-18	-12	-12
Flash Point (COC)	ASTM D 92	°C	214	230	242	242

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