

# TECHNICAL DATA SHEETS

## Chemoil Topdrive Hydraulic Fluid

Chemoil Topdrive Hydraulic Fluid is a high quality, specially designed lubricant containing new-age Friction Modifier's, anti-rust, anti-foam and oxidation inhibitors; plus other additives necessary for the wide range of applications of various topdrive manufacturers. The product is an "all-seasonal" type of oil that resists thickening in cold weather and thinning in the heat of the summer. It is compounded with detergents to keep topdrive hydraulic (HPUs) systems clean and maintain hydraulic control circuits in perfect working condition; and provides excellent protection against seal and pump deterioration.

### EQUIPMENT BENEFITS

- Excellent gear, bearing and pump wear protection
- Multi-functional fluid
- Oxidation and thermal stability for long life
- Excellent rust and corrosion protection
- Compatibility with oil seal materials used in most all topdrive hydraulic systems
- Excellent Heat Transfer capabilities
- Formulated with Friction Modifiers for lower operating temperatures in mission critical systems (HPUs)

### PRODUCT FEATURES

Formulated with highly-refined Group II base stocks for added resistance to thermal breakdown

Provides active anti-wear agents to protect critical components

Delivers added resistance to fluid oxidation

Shear-stable viscosity modifiers provide "stay in grade" protection

### APPLICATIONS

Chemoil Topdrive Hydraulic Fluid is suitable for use in the following applications depending upon the individual viscosity specifications of the individual fluids:

- Allison: C-4
- John Deere: Quatrol, J20C, J20A, J21A, Hy-Gard J14B/C, Type 303 Fluid
- International Harvester: Hy-Tran, B-6
- AGCO (Massey Ferguson) : M-1145, M-1143, M-1110, M-1127B, M-1129A, M-1135 Permatran III, M-1138, M-1141, White Q-1826, & AllisChalmers Power Fluid 821 XL, Duetz-Allis Hyd Trans Fluid, 25743, 272843, & AGCO-Allis
- J.I. Case: TFD (JIC-143/146), Hi-Vis (JIC-185), JIC-144/145, MS-1204, MS1205/1206/1207, MS-1210 (TCH) and B-6

Case New Holland: MAT 3505, MAT 3525, MAT 3526, ESN M2C86-A/B/C, M2C134-A/B/C/D, M2C41-B, M2C43, M2C53-A/B, M2C92-A

- Vickers- I-2986-S, 104C, & M2950S, Denison UTTO, HF-0, HF-01, HF-02
- Kubota Universal Transdraulic Fluid: UTD & Super UTD
- Sundstrand Hydrostatic Transmissions: JDQ-84
- Volvo: BM, VCE 1273.03 & WB-101 (wet brake)
- Caterpillar: TO-2, & MTO (Multi-Application Tractor Oil), for older Backhoe Loader rear axles and Challenger Tractors Military Specification MIL-PRF-2105E
- Eaton Axle PS-037, PS-163, PS-109 (75w-90)
- Mack GO-J Plus (75w-90) and GO-J (85w-140)

*Minor variations in typical physical properties may occur from normal manufacturing processes*

## Chemoil Top Drive Hydraulic Fluid

Property	Test Method	HYDRAULIC
Density@15°C,g/cc 3	ASTM D4052	.8577
API GRAVITY @ 60°F	ASTM D4052	32.43
Vis @ 40°C, cSt	ASTM D445	67.5
Vis @ 100°C, cSt	ASTM D445	10.46
Viscosity Index	ASTM D2270	>140
Flash Point, °C(F)	ASTM D93	198°C(388° F)
Pour Point, °C(F)	ASTM D97	-42°C (-44° F)
Zinc, wt%	ASTM D6481	.0004
Pounds per Gallon	ASTM D1250	7.145
Brookfield@-40°C	ASTM D2983	<4000
Brookfield@-35°C	ASTM D2983	<70000