DURALIFE® HEAVY DUTY HYDRAULIC & POWERSHIFT TRANSMISSION / DRIVE TRAIN OILS

Duralife® Heavy Duty Hydraulic & Powershift Transmission /Drive Train Oils are formulated with high quality base stocks and a premium quality additive package to meet the latest requirements of modern powershift transmissions, final drives, oil immersed brake and hydraulic systems of heavy duty on and off-highway equipment requiring Caterpillar TO-4/TO-4M, Alison C-4 specifications . They maintain a full film of protective lubricant under a wide range of temperature, from very low temperatures to high temperatures. Optimum clutch-friction retention, eliminate clutch slippage.

APPLICATIONS:

Duralife® Heavy Duty Hydraulic & Powershift Transmission /Drive Train Oils are recommended for use in heavy duty manual, powershift and automatic transmissions, hydrostatic transmissions, torque converters, winches, final drives, oil immersed brake, and hydraulic systems of off-highway industries including : construction, mining, ... They are also recommended for use in certain heavy duty automotive type manual transmissions, powershifts and gear cases of on-highway commercial trucks, buses, commercial boats where a Caterpillar TO-4/TO-4M or Alison C-4 quality fluid is specified .

They meet the following performance requirements:

- **Allison C-4, C-3 (10W, 30)**
- **Allison TES-439**
- **Caterpillar TO-4M, TO-4, TO-2**
- **ZF TE-ML-03C/ TE-ML-07F**
- **API CF-2/CF**
- **Komatsu KES 07.868.1 Powershift Transmissions, Komatsu Micro-Clutch (all grades), Komatsu Dresser Equipment**
- **Eaton Fuller Transmissions**
- **Dana Spicer Transmissions**
- **Euclid Equipment**
- **Terex Construction Equipment**
- **Vickers M-2950-S, Vickers 35VQ25A**
- **Ford Type F Transmission Fluid (SAE 10W)**

Note: Not recommended for use in combined farm tractor hydraulic and transmission systems where low brake chatter is a requirement.

BENEFITS:

- Provide outstanding oxidation, thermal stability and sludge control for long oil life
- Controlled frictional properties for smooth shifting and reduced brake chatter
- Excellent shear stability to maintain viscosity over the life of the equipment
- Non-corrosive to steel and other metals. Protect and extend the life of synchronizers
- Excellent load carrying, anti-wear, antirust, anticorrosion, antifoam properties, and EP performance
- Long service life

TYPICAL CHARACTERISTICS

Test	**Method**	**Typical Results**					
SAE Grade		10W	20	30	40	50	60
API Gravity	ASTM D287	29.66	29.29	28.75	28.39	26.78	26.07

Specific Gravity @ 15.6ºC (60ºF)	ASTM D1298	0.878	0.880	0.883	0.885	0.894	0.898
Viscosity @ 40ºC, cSt @ 100ºC, cSt	ASTM D445	41.5 6.5	49.17 7.32	94.0 11.3	132.0 14.5	210.0 19.2	303 24.0
Viscosity Index	ASTM D2270	107	110	107	110	103	100
Flash Point, ºC (ºF)	ASTM D92	215(419)	225(437)	229(445)	235(455)	235(455)	260(500)
Pour Point , ºC (ºF)	ASTM D97	-35(-25)	-30(-22)	-30(-22)	-30(-22)	-18(-0.4)	-12(10)
Sulfated Ash, %wt	ASTM D874	1.2	1.2	1.2	1.2	1.2	1.2
Total Base Number, mgKOH/g	ASTM D2896	8.5	8.5	8.5	8.5	8.5	8.5

The above characteristics are average values based on recent production. Minor variations which do not affect product performance are to be expected in normal manufacture.

WARNING:

Continuous contact with used oil has caused skin cancer in animal tests. Avoid prolonged contact. Thoroughly wash exposed areas with soap and water. Keep out of reach of children.

Don't pollute. Conserve resources. Return used oil and container to collection centers

Reference SDS Number 12098 database on our website at ***www.amtecol.com*** *OR scan the code for a direct link*