



DURALIFE® PAO FULL SYNTHETIC HEAVY DUTY HYDRAULIC & POWERSHIFT TRANSMISSION/DRIVE TRAIN FLUIDS

Duralife® PAO Full Synthetic Heavy Duty Hydraulic & Powershift Transmission Fluids are formulated with PAO synthetic base stocks and a premium quality additive package to meet the latest requirements of major manufacturers of high-torque, heavy duty powershift transmissions, hydraulic systems, drive trains in heavy duty commercial modern equipment requiring Caterpillar TO-4, Allison 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® PAO Full Synthetic Heavy Duty Hydraulic & Powershift Transmission Fluids are recommended for use in heavy duty automotive type manual transmissions, powershifts and gear cases of on-highway commercial trucks, buses, commercial boats and off-highway industries including: construction, mining, and agriculture. They meet the following performance requirements:

**API SERVICE MT-1, MIL- L-2104, Caterpillar TO-4M/TO-4, Allison C-4, Allison TES-439
Eaton Transmission PS-081& PS-164 Rev 7, Dana Powershift Transmission.
Rockwell/Fuller CD50 (PS-081), International TMS-6816
Mack TO-A Plus, ZF FreedomLine, ZF TE-ML 03C
Komatsu KES 07.868.1, Volvo 97305**

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. Improved friction reduction properties
- Protect gear teeth against pitting, spalling and scouring
- Improved cold weather flow ability lubricates components faster and provide better cold weather shift- ability in manual transmissions
- 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					
		10W	5W-20	5W-30	10W-30	30	50
SAE Grade							
API Gravity	ASTM D287	37.35	37.96	36.95	35.96	36.55	34.97
Specific Gravity @ 15.6°C (60°F)	ASTM D1298	0.838	0.835	0.840	0.845	0.842	0.850
Viscosity @ 40°C, cSt	ASTM D445	36.0	42.95	54.30	73.70	77.65	163.00
@ 100°C, cSt		7.1	8.0	10.5	11.5	11.2	18.90
Viscosity Index	ASTM D2270	165	162	188	150	135	132
Flash Point, °C (°F)	ASTM D92	260(500)	235(455)	240(464)	250(482)	260(500)	265(509)
Pour Point , °C (°F)	ASTM D97	-50(-58)	-50(-58)	-50(-58)	-50(-58)	-45(-49)	-38(-36.4)

FZG Gear Test, Fail stage	ISO 14635-1 / DIN 51354	>10	>10	>10	>10	>10	>10
Noack, %wt	ASTM D5800	13.0	9.0	9.0	6.5	5.0	3.4

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 12099 database on our website at www.amtecol.com
OR scan the code for a direct link

