



Published by Product Quality Group - Marathon Petroleum Company LLC



TECHNEWS

MARAFLUID® 4

PRODUCT

Transmission and Drive Train Fluid

GRADES

SAE 10W, SAE 30, SAE 50

FEATURES

Marafluid® 4 is the product for Caterpillar TO-4 applications. It is designed to meet the special requirements of farm and construction equipment that call for TO-4 oil.

- Reduced gear wear
- Increased durability of bronze friction discs – less slip time
- Formulated to latest Caterpillar requirements
- Improved materials compatibility, including fluoroelastomers
- Excellent thermal oxidation control
- Available in SAE 10W, SAE 30 and SAE 50 grades
- Especially formulated for rust control
- Controlled foaming
- Regulated flash point

APPLICATIONS

Transmission, differential, final drive and hydraulic systems of certain construction and farm equipment where the manufacturer recommends the following products:

- Caterpillar TO-4 (See Recommended Usage)
- Allison C-4
- ZF TE-ML03
- API GL 1,2,3

RECOMMENDED USAGE:

- Friction Devices
 - Power Shift Transmissions
 - Clutches
 - Brakes
- Drive Train Components
 - Final Drives
 - Bevel Gears
 - Differentials
- Hydraulic Systems

OPERATING RANGES (°F)			
Application	SAE 10W	SAE 30	SAE 50
Powershift Transmission	-4 to +50	32 to 95	50 to 122
Final Drive / Differential Gear Boxes	-22 to +32	-4 to +77	32 to 122
Final Drive – Off Highway	-22 to +14	-4 to +59	32 to 122
Hydraulic Systems	-4 to +104	50 to 122	N/A

TYPICAL PROPERTIES			
SAE Grade	SAE 10W	SAE 30	SAE 50
Gravity, °API	28.3	26.5	25.4
Viscosity, cSt@40°C	48.5	97.5	241.7
cSt@100°C	7.0	10.9	19.8
Viscosity Index	101	95	94
Flash Point, COC, °C	440	480	500
Pour Point, °C	-35	-25	-15
Sulfated Ash, % Wt.	1.2	1.2	1.2