



4T Semi-Synthetic MA

Phillips 66® 4T Semi-Synthetic MA is a premium quality, part-synthetic engine oil designed primarily for use in 4-stroke cycle motorcycles, scooters, and all-terrain vehicles (ATVs). It also may be used as transmission oil in motorcycles and ATVs where the manufacturer specifies the use of motor oil in the transmission.

4T Semi-Synthetic MA is formulated to provide excellent wear protection, to minimize the formation of sludge and varnish, and to resist viscosity and thermal breakdown at high temperatures. It also protects against rust and bearing corrosion and is resistant to excessive foam buildup and air entrainment. The part-synthetic formulation provides additional thermal stability at high temperatures.

4T Semi-Synthetic MA meets the performance requirements of major motorcycle manufacturers and API Service SL. It meets JASO MA friction test requirements for use in motorcycle engines with integrated clutch and transmission.

Applications

- 4-stroke cycle motorcycles, scooters, and ATVs
- 4-stroke cycle gasoline engines in other mobile or stationary equipment where an API Service SL quality oil is specified

4T Semi-Synthetic MA meets or exceeds the requirements of and is approved for:

- JASO T 903:2011 Performance Classification MA

Features/Benefits

- Enhanced resistance to viscosity and thermal breakdown at high temperatures
- Protects against sludge and varnish formation
- Protects against scuffing and wear
- High shear stability
- Protects against rust and bearing corrosion
- Good resistance to foaming and air entrainment
- Proper frictional properties to avoid clutch slippage

**Part-Synthetic
Engine Oil for
4-Stroke Cycle
Motorcycles,
Scooters & ATVs**





4T Semi-Synthetic MA

Typical Properties		
SAE Grade	10W-40	15W-50
Specific Gravity @ 60°F	0.868	0.872
Density, lbs/gal @ 60°F	7.23	7.26
Color, ASTM D1500	2.5	2.5
Flash Point (COC), °C (°F)	234 (453)	234 (453)
Pour Point, °C (°F)	-46 (-51)	-46 (-51)
Viscosity, Kinematic		
cSt @ 40°C	107	157
cSt @ 100°C	15.3	19.9
Viscosity Index	150	147
Cold Cranking Viscosity, cP	6,950	6,115
@ (°C)	(-25)	(-20)
High Temp/High Shear Viscosity, cP @ 150°C	4.2	5.0
Sulfated Ash, ASTM D874, wt %	0.98	0.98
Total Base Number (TBN), ASTM D2896	7.7	7.7
Phosphorus, wt %	0.114	0.114
Zinc, wt %	0.125	0.125

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/EN/products/Pages/MSDS.aspx>.