



The First in Synthetics®

# Synthetic 10W-40 Motorcycle Oil

API SG, SL/CF • JASO MA/MA2 • API GL-1

High Performance Lubricant for Engines and Transmissions



## PRODUCT DESCRIPTION

AMSOIL Synthetic 10W-40 Motorcycle Oil (MCF) is a premium oil designed for those who demand the absolute best lubrication for their motorcycles. AMSOIL MCF is the result of extensive research, and it is specially formulated to excel in all areas unique to motorcycles, including high engine RPM, wet clutch lubrication, extreme pressure regions of gears and rust common to short drives and storage.

AMSOIL MCF is multi-functional and fulfills the requirements of both domestic and foreign motorcycles. It outperforms other conventional and synthetic motorcycle oils.

AMSOIL, the leader in synthetic lubrication, produced the world's first API qualified synthetic motor oil in 1972. Trust the extensive experience of AMSOIL *The First in Synthetics®* to do the best job protecting your motorcycle.

## Reduces Friction, Heat and Wear

In high heat conditions, engine protection is not sacrificed with AMSOIL Synthetic Motorcycle Oil. It has the best high temperature film strength (see High Temperature Viscosity Protection graph below) of all oils tested and contains a heavy treatment of anti-wear additives to reduce wear regardless of the operating conditions (see Wear Comparison graph on reverse). AMSOIL MCF is thermally (heat) stable and contains maximum levels of oxidation inhibitor additives. It is extremely resistant to breakdown and engineered to prevent damaging sludge and carbon deposits for superior engine cleanliness.

## Provides Extreme Pressure Quality Protection for Gears

With AMSOIL MCF, there is no need for separate transmission lubricants. It is absolutely shear stable and will not thin out from mechanical activity.

AMSOIL MCF performs like a gear lube without the negative effects of extreme pressure additives. In the FZG gear test, AMSOIL MCF achieved a perfect score with a "zero" wear rating (see photo below).

## Delivers Superior Rust Protection

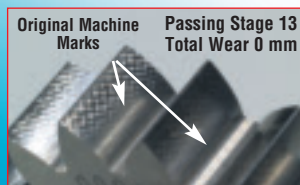
Motorcycles are prone to rust from storage, humidity and short drives. Rust can cause major damage such as uncontrolled wear, compression loss and blow-by. Good rust protection, however, comes by design and is not natural to engine oils. Unlike many motorcycle oils, AMSOIL MCF contains special anti-rust agents. It passes the ASTM D-1748 humidity cabinet rust test and clearly demonstrates superior rust protection (see photo on reverse).

## Provides Excellent Wet Clutch Performance

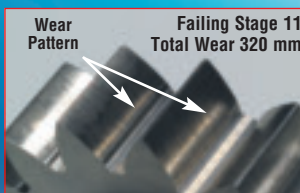
AMSOIL MCF contains no friction modifiers and promotes smooth shifting and positive clutch engagement. AMSOIL MCF controls heat and prevents slippage and glazing, helping improve clutch life. AMSOIL Synthetic 10W-40 Motorcycle Oil meets the wet clutch frictional requirements of MA/MA2 as outlined in JASO Standard T903: 2006.



### FZG Gear Test (ASTM D-5182)



AMSOIL 10W-40 (MCF)



Motul 300 V 10W-40

### Rust Test (ASTM D-1748)

AMSOIL 10W-40 (MCF)



Castrol GPS 10W-40



## TYPICAL TECHNICAL PROPERTIES

### AMSOIL High Performance Synthetic 10W-40 Motorcycle Oil (MCF)

Kinematic Viscosity @ 100°C, cSt (ASTM D-445)	13.9
Kinematic Viscosity @ 40°C, cSt (ASTM D-445)	93.36
Viscosity Index (ASTM D-2270)	152
Pour Point °C (°F) (ASTM D-97)	-46 (-51)
Flash Point °C (°F) (ASTM D-92)	234 (453)
High-Temperature/High-Shear Viscosity (ASTM D-4683 @ 150°C, 1.0 X 10 <sup>6</sup> s-1), cP	4.52
Four-Ball Wear Test (ASTM D-4172 @ 40 kgf, 150°C, 1800 rpm, 1 hr), Scar, mm	0.40
FZG (ASTM D-5182), Load Stage Pass (Wear in mm)	13 (0 mm)
Noack Volatility, % weight loss (g/100g) (ASTM D-5800)	6.44
Foam (ASTM D-892, Sequence I, II & III)	0/0/0
Shear Stability Kurt Orbahn (ASTM D-6278), % viscosity change 120 cycles	0.495
Rust Test - Humidity Cabinet (ASTM D-1748)	No Rust, PASS
Total Base Number	11

### APPLICATIONS

AMSOIL Synthetic 10W-40 Motorcycle Oil is recommended for liquid or air-cooled 4-stroke engines. It meets SAE 80W/90, API GL-1 gear oil requirements and is recommended for transmissions on both 4- and 2-stroke motorcycles. AMSOIL MCF is recommended for Honda®, Kawasaki®, Yamaha®, Suzuki®, BMW®, Husqvarna®, Victory® and other motorcycles where 10W-40 or 20W-40 engine oils or SAE 80W/90, GL-1 gear oils are used. Not recommended where an API GL-4 or GL-5 gear oil is required.

### MIXING AMSOIL

AMSOIL Synthetic 10W-40 Motorcycle Oil is compatible with conventional and synthetic motor oils; however, mixing oils may shorten the oil life expectancy and reduce the performance benefits. AMSOIL does not support extended drain intervals where oils have been mixed.

Aftermarket oil additives are not recommended for use with AMSOIL motorcycle oil.

### SERVICE LIFE

For "on-road" use in engines and transmissions, change AMSOIL MCF and AMSOIL engine oil filter at twice the motorcycle manufacturer change interval or one year, whichever comes first. Change other brand oil filters at standard intervals.

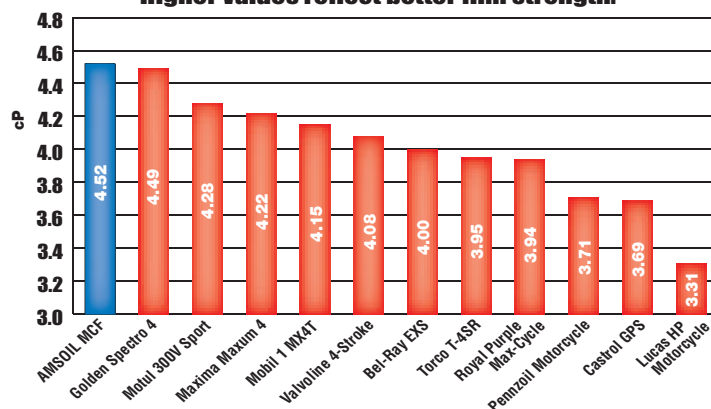
For "off-road" use in engines and transmissions, change AMSOIL MCF at the standard motorcycle manufacturer change interval.

For racing or in engines modified from the original factory design, no change interval recommendation is made. Oil changes are at the owner's discretion.

### 10W-40 Motorcycle Oil High-Temperature Viscosity Protection

ASTM D-4683 Test Done March, 2005

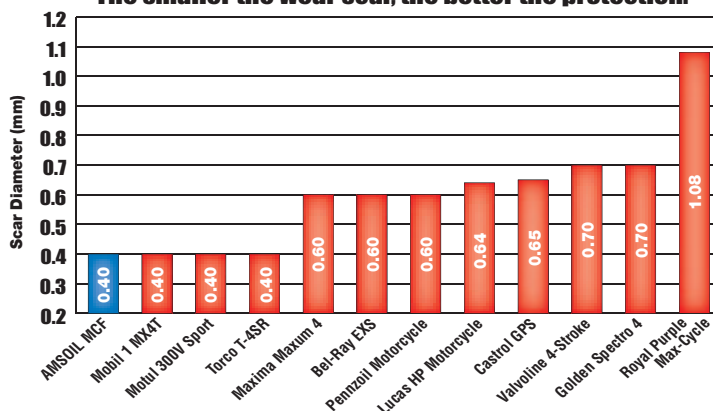
**Higher values reflect better film strength.**



### 10W-40 Motorcycle Oil 4-Ball Wear Comparison

ASTM D-4172 Test Done March, 2005

**The smaller the wear scar, the better the protection.**



AMSOIL products and Dealership information are available from your local AMSOIL Dealer.

