Mobil

Mobil 1 Motorcycle Oils

Full Synthetic, High-Performance Motorcycle Engine Oils

Product Description

Mobil 1 Motorcycle Oils are advanced performance synthetic motorcycle oils. The unique, synthetic structure of the Mobil 1 Motorcycle formulations enables them to offer advantages beyond conventional motorcycle oils of similar viscosities. For example, base oils become lighter in viscosity as temperature increase. This characteristic forces manufacturers of oils to use thickeners which will help the oil maintain its viscosity as the temperature increase. These thickeners, however, can shear down and lose their thickening capacity in an operating engine or transmission. Synthetic fluids do not require as much thickener to achieve a multigrade viscosity rating and, in some cases, do not require any thickener. As a result, synthetic formulations tend to be very shear stable and thus, provide a solid, protective oil film for engine bearings, piston rings, transmission gears and other critical engine parts.

Both Mobil 1 Motorcycle formulations offer excellent flow characteristics at low temperatures to help reduce engine wear at start-up, and provide outstanding resistance to oxidation and/or volatilization at high temperatures, both of which degrade the oil. Further, the Mobil 1 Motorcycle Oils help provide outstanding protection against engine wear under high-temperature and high engine speed conditions. Each of the Mobil 1 Motorcycle product formulations have been optimized to help meet the unique performance characteristics demanded by motorcycle engines and thus, provide an extremely high level of performance and protection for motorcycle engines

Features and Potential Benefits

Mobil 1 Racing 4T 10W-40 and Mobil 1 V-Twin 20W-50 4-cycle motorcycle oils

- Maximum shear stability to help resist viscosity shear down in high performance engines and transmissions
- Exceptional thermal stability to help resist oxidation and high-temperature degradation
- · Outstanding protection against wear of engine and transmission components
- Enhanced lubrication to help maintain maximum power and acceleration over the life of the engine
- Optimized wet-clutch performance, meets JASO MA
- Excellent low temperature flow characteristics to help minimize engine wear during start-up

Applications

Mobil 1 Motorcycle Oils are full synthetic, high-performance engine oils formulated specifically to meet the demanding needs of motorcycle engines. Mobil 1 Racing 4T 10W-40 is designed primarily for on-road, high-performance, 4-cycle sport bikes, however, it may be used in other types of on and off-road 4-cycle motorcycles especially where a 10W-40 viscosity grade is specified. Mobil 1 V-Twin 20W-50 is formulated to help offer outstanding protection in 4-cycle, V-Twin type engines, particularly those which are air cooled and tend to run hotter than other types of engines.

Mobil 1 Racing 4T 10W-40 and Mobil 1 V-Twin 20W-50 are recommended for 4-cycle, motorcycles which specify the use of a 10W-40 or a 20W-50 engine oil, respectively. These products will help provide excellent performance in motorcycle engines that are designed with a common engine/transmission lubrication system or where the engine lubrication system is separate from the transmission system. In the case of the latter, follow the manufacturer's recommendation for the type of fluid to be used in the transmission. Mobil 1 Racing 4T 10W-40 and Mobil 1 V-Twin 20W-50 engine oils are also designed to help provide the proper frictional characteristics necessary for wet-clutch engine/transmission systems. Mobil 1 Racing 4T 10W-40 and Mobil 1 V-Twin 20W-50 meet or exceed the requirements of API Service Categories SJ, SH, SG/CF, CD and JASO MA . They have been fully tested, both on laboratory dynamometers and in the field, to help provide optimum horsepower and acceleration.

Specifications and Approvals

Mobil 1 Motorcycle Oils meet or exceed the requirements	of: Racing 4T	V-Twin	
API SM	Х		
API SL	Х		
API SJ	Х	Х	
API SH	Х		
API CF	Х	Х	
JASO MA	Х	Х	

Typical Properties

Mobil 1 Motorcycle Oils	Racing 4T	V-Twin	
Engine/Application Type	4-Cycle	4-Cycle	
SAE Grade	10W-40	20W-50	
Service Classification	API SM,SL, SJ,SH,CF,JASO MA API SJ,CF,JASO MA		
Density, g/ml @ 15.6°C (ASTM D4052)	0.86	0.87	
Flash Point, °C (ASTM D93),	212	214	
Pour Point,°C (ASTM D97)	-45	-42	
Kinematic Viscosity, cSt @ 40°C (ASTM D445)	82.0	172.3	
Kinematic Viscosity, cSt @ 100°C (ASTM D445)	13.1	20.8	
Viscosity Index	161	142	
Cold Cranking, cP (ASTM D5293)	4,640 @ -25°C	7,500 @ -15°C	
Pumping, cP (ASTM D4684)	11,700 @ -30°C	14,000 @ -20°C	

Health and Safety

Based on available toxicological information, it has been determined that these products pose no significant health risk when used and handled properly. Information on use and handling, as well as health and safety information, can be found in the Material Safety Data Sheets which can be obtained from your local distributor; via the Internet on http://www.mobil.com.

For additional technical information or to identify the nearest U.S. Mobil supply source, call 1-800-662-4525.

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Typical Properties are typical of those obtained with normal production tolerance and do not constitute a specification. Variations that do not affect product performance are to be expected during normal manufacture and at different blending locations. The information contained herein is subject to change without notice. All products may not be available locally. For more information, contact your local ExxonMobil contact or visit <u>www.exxonmobil.com</u>

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